

**UNIVERSITY OF KWAZULU-NATAL**

**INVESTIGATING SERVICE QUALITY PERCEPTIONS  
IN TERTIARY INSTITUTIONS – THE CASE OF  
UNIVERSITY OF KWAZULU-NATAL**

**By**

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## DECLARATION

I Vannie Naidoo declare that

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*GOD IS MY VICTORY OVER  
EVERY STRONGHOLD AND MY  
CONFIDENCE OVER EVERY FEAR (ANONYMOUS)....*

The most important person in my life, my dad, passed away on 10 May 2012. He was 79 years old, but a powerhouse of energy, enthusiasm and humility. When he left, it was as if a gaping hole was left in my life. It was as if my world had stopped turning and a piece of my heart that belonged to my daddy went cold... This work is dedicated to my dad, the man who always believed in me, the man who moulded me into the person I am today. I lived my life through his eyes. He was my biggest champion in this life. He was the one who carried my books to leave me at the bus stop for college, the one who did the dishes for me so I could concentrate on my studies, the one who thought I could do and be anything I wanted, the one who sat in my car and showed me places and things I never knew existed. Daddy made me see the world in a different way; he introduced me to the different religions, taught me to pray, and watched over me when I was sick.

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## ABSTRACT

The study aimed to gain insight into staff and student perceptions of service quality at tertiary institutions. As noted in the literature review, service marketing has evolved over time, as more research has been conducted on quality and how it impacts on the customer. Since tertiary education forms part of service marketing, this study aims to identify the quality variables attached to this service sector and illustrate how each quality variable affects the students and staff within the university environment. The literature review highlighted that universities should not merely subscribe to service quality for its own sake, as high levels of service quality within tertiary institutions yield long-term benefits. These include competitive advantage, reducing customer recruitment costs, promoting positive word of mouth and reputation and building loyal internal customers, which all result in a higher Return on Investment (RoI) in the long term. The foundation of this study is based on the theories relating to the SERVQUAL and Gaps model of service quality developed by Parasuraman, Zeithaml and Berry (1985). The study adapted the variables pertaining to the tertiary education sector to the SERVQUAL instrument. The researcher opted to use a five point LIKERT scale for the questionnaire, which consisted of closed-ended questions. The questionnaire used in the study was adapted to the quality dimensions peculiar to the tertiary education environment and to the SERVQUAL instrument. Convenience sampling technique was employed. The researcher identified the population as all students and staff at the University of KwaZulu-Natal, consisting of approximately 40 000 students and 4 170 staff. The samples included 380 students and 354 academic and non-academic staff from the Westville, Howard College, Edgewood, Nelson R. Mandela School of Medicine and Pietermaritzburg campuses. These figures were arrived at using Krejcie and Morgan's (1970) tables on sample size for a given population. The Statistical Package for the Social Sciences (SPSS) version 13 for Windows programme was used for the analysis and presentation of the data. Both descriptive and inferential statistics were used to analyse data. Data will be presented in tables, charts and graphs to illustrate the results of the survey. The findings of this study record the perceptions and expectations of staff and students respectively. Further, the relevant quality "Gaps for Tangibles, Responsiveness, Reliability Empathy and Assurance" are identified for staff and students. Thereafter relevant recommendations are put forward to address these gaps. The findings of the empirical study illustrate that both staff and students at the University of KwaZulu-Natal were very dissatisfied with the quality of services provided. These findings can be used by University management to improve their marketing strategies for each service offering made to students and staff within the University. It is recommended that in order for the University to be recognized as an institution of higher learning with a high quality of excellence it needs to have an organizational culture that embraces high levels of service quality.

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# CHAPTER ONE

## OVERVIEW OF THE STUDY

### 1.1 Introduction and background

The competition for students within the tertiary environment has become more aggressive over the years as the global recession affects economies across the world. The global financial crisis has rendered university education a luxury rather than a necessity, resulting in reduced recruitment pool. Universities therefore have to come up with more inventive ways to attract students. Given the financial and resource constraints under which universities operate, it is essential that their strategic initiatives to attract students are based on an understanding of student perceptions. Marketing campaigns can then be designed to attract these students. However, understanding student perceptions is not as easy as it seems, as students have different preferences, opinions, attitudes and lifestyles as well as varied demographic profiles.

Perceptions play a pivotal role in students' choice of a university. Therefore a university like the University of KwaZulu-Natal (UKZN) needs to set itself apart from other tertiary institutions. One way to achieve this strategically is to provide top quality service. If a student is viewed as a „service receiver“, „service quality“ to such a service receiver could mean many things, including the University being a world ranked tertiary institution; having a well established faculty; being well recognized within South Africa and the community within which it is located; providing quality education programmes at all five campuses; offering degrees and diplomas that are market related and in tune with the dynamics of the labour market; providing adequate funding and scholarships to deserving students; employing well-recognized and highly skilled academics and efficient administrative and support staff that have students' best interests at heart; providing a safe learning environment; and having well equipped lecture venues, laboratories and libraries and visually appealing surroundings. These are but some of the distinguishing characteristics of high quality service that can set a university apart from others.

From a strategic perspective, universities all over the world are becoming more aware of the need for quality. According to studies conducted by Aldridge and Rowley (2001) and Oldfield and Baron, (2000), measuring service quality within higher education is a global phenomenon. One way to measure quality is to identify student perceptions as they constitute universities' major marketing segment. When planning curricula, housing and teaching venues the needs of students must be taken into account. Therefore, it is essential that universities adopt customer-

orientated definitions of service quality. Meeting the needs of customers, who are the student population of a university, is the key element in defining service quality within a tertiary institution.

When marketing its programs, a university's service quality is an integral part of its service offering to students. Taken a step further, excellent service quality could be an institution's source of competitive advantage, as it sets it apart from other universities and makes it more attractive to students. Kasper, van Heldsdingen and Gabbot (2006: 176) argue that one of the potential benefits of high quality service is that it creates a competitive advantage for the organization by insulating customers from competitors. If the service delivered is perceived to be equal or of higher quality than that of competitors, there is no motivation for customers to defect, regardless of poaching tactics. In order to enhance service quality and create a strong competitive advantage staff (academic and non-academic) need to be in tune with the university's service commitment, providing high quality services to the students at all levels of the service delivery process. From a strategic perspective, a culture and ethos of commitment to quality should be included in the strategic vision and mission of the University.

This study was conducted at UKZN. This institution is the largest university in the province of KwaZulu-Natal. It has five campuses; four in Durban and one in Pietermaritzburg. An in-depth study was conducted among staff and students at UKZN to determine their perceptions of service quality. The researcher aimed to identify quality at UKZN in line with different theories presented in the literature.

Harvey and Green (1993:3) observed that: "quality can be viewed as exceptional, as perfection (or consistency), as fitness for purpose, as value for money and as transformative." The researcher concurs with this perspective. In the case of UKZN, if students perceive that it has exceptional service offerings, embodying academic excellence, high standards within its academic programmes and research output and is a highly-ranked academic institution with a reputable image, their view of institution would be enhanced.

However, measuring quality within a university is different from measuring quality within a private sector company, for example the Toyota plant. Products are different from services. In most instances, products can be seen, touched or tasted. This makes it easier to measure the quality of a product. According to Hoffman and Bateman (2006:28) service quality is different from product quality due to its intangible nature. This makes it more difficult to measure. Tertiary education services falls under the services domain. Parasuraman, Berry and Zeithaml (1986) were pioneering researchers in the field of service marketing. They conducted extensive



studies that measured customer satisfaction by measuring quality. Parasuraman et al developed the SERVQUAL model to test quality dimensions in services. Since tertiary institutions are also providers of a service, the SERVQUAL model can be used to evaluate their performance. Soutar and McNeil (1996: 75) note that the SERVQUAL model integrates several measures of accountability which have been found to be useful in the context of tertiary institutions. Singh and Khanduja (2010:297) comment that service firms, like other organizations, are realizing the significance of customer-centred philosophies and are turning to quality management approaches to help manage their businesses.

Having consulted other studies on quality within tertiary education, the researcher is of the opinion that improved service quality can be achieved within tertiary institutions if staff is motivated, educated and trained to deliver quality services. Quality improvement can also be achieved by introducing customer care initiatives in tertiary institutions. A tertiary institution can become a market leader in its sector if taps into issues of service quality and impacts on students' levels of customer satisfaction. Providing competitive, high quality service can enhance the image and reputation of the university and this can be a major driver in student intake.

Baron and Harris (1995: 167) observe that issues of service quality and customer satisfaction lie at the heart of service marketing and management and that both are seen as desirable outputs of any service strategy. Therefore the researcher was of the view that there was a need to study quality at UKZN, as well as the way that students and staff at the University perceive quality. The study aimed to highlight gaps in the service quality dimensions and put forward recommendations to close these gaps in the foreseeable future.

## **1.2 Motivation for the study**

The tertiary education sector is becoming highly competitive. To maintain a competitive edge in the market place, a university has to identify quality variables that impact on students' perceptions and use these findings to implement high quality service in its core and secondary services.

This study was motivated by the following factors:

- The literature reviewed for this study revealed that there is a paucity of research on the area of service quality within tertiary institutions in South Africa. While some studies

have been undertaken on a segment of a South African university, such as students from a specific faculty, undergraduate students, postgraduate students or foreign students, there is no comprehensive study that examines student and academic and support staff perceptions of quality dimensions. Furthermore, previous South African studies have focused on students, rather than both staff and students. The current study will view service quality within tertiary institutions from a new paradigm. It will thus add to the body of knowledge and help identify the variables that can close the gaps and improve the service experience within tertiary institutions.

- Each year, UKZN experiences violent student protests related to the poor quality of services at the University in terms of housing, financial aid etc. The researcher hopes that this study will help management to make informed decisions on the variables that affect service quality, service features, student demographics, customer satisfaction and continued customer loyalty.
- The researcher observed that staff is the first contact students have with the University; it is therefore important to understand their views on quality.
- Staff is an important university stakeholder. The researcher was therefore of the opinion that the views of staff should be considered in the debate on service quality and that they should be encouraged to suggest ways to improve service quality.
- Conducting a quality survey among students and staff at UKZN could reveal gaps in the quality variables. Measuring quality using the SERVQUAL instrument would indicate the gaps in reliability, responsiveness, tangibles, assurance and empathy. These gaps can then be addressed by the University. Thereafter, high levels of quality and service excellence can be used by UKZN management as a strong competitive advantage when competing with other universities.

### **1.3 Statement of the problem**

The research problem and sub-problems will be discussed below.

### **1.3.1 Research Problem**

Measuring service quality within tertiary institutions is an indicator of whether students and staff are satisfied or dissatisfied with the services offered.

### **1.3.2 Sub-problems**

From the research problem above, the sub-problems listed below will be addressed.

The extent to which:

1.3.2.1 The various service quality models apply to tertiary institutions;

1.3.2.2. The SERVQUAL model is relevant in identifying gaps in UKZN's service delivery;

1.3.2.3. Students perceive the quality of the service offerings;

1.3.2.4. Staff perceive the quality of the service offerings; and

1.3.2.5. Management and staff at UKZN can improve service quality within the University.

### **1.4 Aim of the study**

The aim of the study is to identify service quality variables that impact on staff and student perceptions of UKZN. This will assist in identifying any quality gaps in tangibles, reliability, responsiveness, assurance and empathy which can help management to align strategies to close these gaps in the future. Closing these quality gaps will increase student and staff satisfaction with the service being provided by the University.

### **1.5 Objectives of the study**

1.5.1 To identify models of service quality that may apply to tertiary institutions.

1.5.2 To identify students' perceptions on quality variables with respect to tangibles, reliability, responsiveness, assurance and empathy.

1.5.3 To determine students' expectations of the quality of tertiary education services.

1.5.4 To identify staff perceptions on quality variables with respect to tangibles, reliability, responsiveness, assurance and empathy.

1.5.5 To assess UKZN's staff expectations of the quality of tertiary education services.

1.5.6 To examine the size and direction of any quality gaps found between staff and students.

1.5.7 To examine the size and direction of any quality gaps found between academic and non-academic staff.

## **1.6 Key questions pertaining to the research**

1.6.1 What models of service quality are identified in the study and which of these can be used for tertiary education services?

1.6.2 What are UKZN students' perceptions of quality variables such as tangibles, reliability, responsiveness, assurance and empathy?

1.6.3 What are students' expectations of the quality of tertiary educational services?

1.6.4 What are UKZN staff's perceptions of quality variables such as tangibles, reliability, responsiveness, assurance and empathy?

1.6.5 What are staff's expectations of the quality of tertiary education services?

1.6.6 What are the size and direction of any gaps found between staff and students?

1.6.7 What are the size and direction of any gaps found between academic and non-academic staff?

## 1.7 Hypotheses

The hypotheses below will be tested in this study in order to establish which are valid and accordingly, will be retained.

- 1.7.1 H1-There is a statistically significant difference in the perceptions of the service quality dimensions amongst the biographical data variables for staff and students respectively.
- 1.7.2 H2- There is a statistically significant difference in expectations of the service quality dimensions amongst the biographical data variables for staff and students respectively.
- 1.7.3 H3-There is a statistically significant difference in the service quality gaps amongst staff and students.
- 1.7.4 H3.1-There is a statistically significant difference in the service quality gaps for academic and support/administration staff.
- 1.7.5 H3.2-There is a statistically significant difference in the gaps scores between male and female students.
- 1.7.6 H3.3-There is a statistically significant difference in the gaps scores between undergraduate and postgraduate students.
- 1.7.7 H3.4-There is a statistically significant difference in the gap scores amongst the local and international students.
- 1.7.8 H3.5-There is a statistically significant difference in the gap scores amongst the students on the different UKZN campuses.
- 1.7.9. H3.6-There is a statistically significant difference in the gap scores between male and female staff.
- 1.7.10 H3.7-There is a statistically significant difference in the gap scores between permanent and contract staff.

1.7.11 H3.8-There is a statistically significant difference between the gap scores for the general questions amongst students.

1.7.12 H3.9-There is a statistically significant difference between the gap scores for the general questions amongst staff.

## **1.8 Scope of the study**

This study is confined to staff and students at UKZN on the Westville, Howard College, Edgewood, Nelson R. Mandela School of Medicine and Pietermaritzburg campuses. Postgraduate and undergraduate students and international and local students were targeted to participate in the survey. The survey was conducted among all staff at the five campuses that were willing to participate. The scope of the study did not include other universities in the KwaZulu-Natal province or other universities in South Africa.

## **1.9 Research methodology**

Both primary and secondary research methods were used by the researcher to collect data for the study.

Secondary research methods included a literature review of the most recent texts, papers, journals articles, UKZN documents (Faculty brochures, Strategic Plan documents, the Merger Report 2007, the Institutional Audit Portfolio, Annual Reports for 2004-2007) and Government Acts in order to gain a clear understanding of the definitions, theories and concepts of quality within tertiary institutions, in general, and UKZN in particular.

Primary data were collected by the researcher through a survey among students and staff at UKZN using a self-administered questionnaire. The survey was designed to collect information from staff and students on their perceptions of service quality at UKZN. The survey was conducted among students and staff on all five UKZN campuses, namely, Westville, the Nelson R. Mandela School of Medicine, Howard College, Pietermaritzburg and Edgewood.

The questionnaire design had important implications for the study and the researcher opted to use a five point Likert Scale. Closed-ended questions were structured. The questionnaire used in the study was adapted to the quality dimensions peculiar to tertiary education environment and to the SERVQUAL instrument developed by Parasuraman et al (1985). Hittman (1993:77-80) suggests that it would seem rational to use the SERVQUAL model as it not only evaluates the teaching component of a tertiary institution, but also includes aspects of the total service environment experienced by the student.

A pilot study was conducted among 20 staff and 40 students from UKZN's five campuses. The questionnaire was pre-tested on a small sample of respondents to test the appropriateness of the questions and to ascertain if the questionnaire was comprehensible.

With regards to sampling techniques, non-probability sampling procedures were used by the researcher as they met the sampling objectives satisfactorily. Additional reasons for choosing non-probability over probability sampling are cost and time issues. With non-probability sampling, the questionnaires were given to any staff or student willing to complete them.

Convenience sampling was employed by the researcher and by trained field workers. The researcher and the field workers had the freedom to choose whoever they could find, hence the term "convenience sampling". The researcher visited some lecture halls after gaining the permission of the respective lecturers, and conducted the survey. The researcher also employed research assistants to issue the survey to students who frequented the libraries, computer LANs, cafeterias and student residences on all five campuses. The research assistants also administered the questionnaire to the staff on the five different campuses.

With regards to the population for this study, the researcher identified the population as all students and staff at UKZN. The population size for the study is 40 000 students and 4 170 staff, (UKZN Strategic Plan, 2007).

In terms of sample size, the samples included 380 students and 354 academic and non-academic staff from the Westville, Howard College, Edgewood, Nelson R. Mandela School of Medicine and Pietermaritzburg campuses. These figures were arrived at using Krejcie and Morgan's (1970) tables on sample size for a given population.

For the purposes of data analysis and presentation, the completed questionnaires were collected and numbered to facilitate the data capture process. Once the data were cleaned and edited they were captured on an Excel spreadsheet. The Statistical Package for the Social Sciences (SPSS)

version 13 for Windows programme was used for the analysis and presentation of the data. Regression analysis was also used. Both descriptive and inferential statistics were used to analyse data. Data was presented in tables, charts and graphs to illustrate the results of the survey.

### **1.10 Contribution of the study**

This study contributes to service marketing as service quality has a direct impact on how the customer perceives the service offering made by the service provider. Tertiary education is part of the service marketing arena. In light of the limited research that has been conducted on service quality within tertiary institutions (as opposed to the commercial sector), this study makes a meaningful contribution by adding to the body of knowledge regarding student perceptions of service quality within tertiary institutions in South Africa and globally. Locating the study within a South African university leads to the production of knowledge on the unique challenges posed by transformation, mergers and university re-organization that are specific to South Africa.

The study is based in Africa, which has a unique higher education dynamic wherein tertiary education is not free as in some European countries. This in itself possesses a challenge as students who pay for tertiary education view the services it offers more critically; they require value for their money as they are “paying customers” of the university. There is very little literature on tertiary education services on the African continent, in contrast to Europe and other western countries. The studies conducted in Africa focus on students only, or a segment of the university population.

This research study focused on staff and students at UKZN. The study also identified and discussed tertiary education services as either academic or support services that form part of the total service offering made to the students. The researcher contributes to the body of knowledge by identifying and discussing in detail the total service offering to students in the academic and support service areas.

The researcher identified service quality variables that have an impact on student and staff perceptions within a university. This study reveals the quality perceptions of staff and students at UKZN. It established whether staff and students were satisfied or dissatisfied with UKZN’s service offerings. The study highlights the quality gaps for staff, as well as for students. By



identifying the quality gaps, this study provides information that University management can use when planning their service quality strategies.

The study adds to the body of knowledge as most previous studies have focused on students only. The study also was based on all five campuses of the University, rather than just one campus. It also focused on the entire student and staff population at UKZN. A further contribution of the study is that its findings and recommendation can help UKZN management to identify service quality gaps and find way to close these gaps. It is also envisaged that the findings and recommendations emanating from this study will be disseminated to the KwaZulu-Natal Department of Education and other universities in South Africa in order to make them aware of the various benefits of providing high quality services and why universities should spend more time and money in understanding students and staff perceptions.

### **1.11 Expected problems with the study and limitations**

The major problem experienced in this study was that student protests in 2010 made it difficult to collect questionnaires from the respondents. Student demonstrations resulted in the closure of campuses and the cancellation of lectures. The researcher had to resend questionnaires to staff and students who were affected by these protests.

Furthermore, University staff was not keen on completing the questionnaires. They cited the merger and the up-coming reconfiguration of the University structure as reasons that demotivated them and lowered staff morale within the University. Non-academic staff had to re-apply for posts and they were de-motivated by the impending structural changes taking place at UKZN; some refused to participate in the survey on these grounds.

Due to time and budgetary constraints, the study was conducted at UKZN campuses only and not extended to all South African universities.

Convenience sampling technique was used; therefore generalization to other universities cannot be drawn and applied.

Because closed-ended questions were used in the questionnaire, no follow-ups were carried out with respondents.

## **1.12 Structure of the study**

Chapter two provides a literature review on service quality. The researcher sets out to define quality, identifies how an organization views the various quality issues and indicates the various models that service organizations can apply to achieve quality within their organization. The literature review illustrates that quality affects managerial, marketing and strategic issues within an organization. It also highlights how service organizations can monitor and improve service quality dimensions and the services provided by a tertiary institution. Lastly, it provides a review of service quality within tertiary institutions.

Chapter three focuses provides a brief overview of UKZN and a detailed discussion of the University's five campuses, its management structure and mission and goals. It outlines a brief history of the University before and after the merger and the re-organization of its structure. Lastly, the quality management systems that are in place at the UKZN are explored.

Chapter four presents a detailed overview of the research methodology and design that were employed to conduct this study. The problem and sub-problems and hypotheses to be tested are also stated. The research method, data collection instrument, questionnaire design, the pilot study, population and sample, and sampling method are also discussed. The validity and reliability of the data collection method is highlighted, as well as the various statistical techniques used to analyse the data. Lastly, the limitations of the study are outlined.

Chapter five presents and analyzes the study results. The data for the study were obtained by analyzing the responses to the questionnaires administered to UKZN staff and students. Staff and student respondents were asked their views on service quality within UKZN. Descriptive and inferential statistics were used to answer the key research questions. Overall it emerged that both staff and students at the UKZN are very dissatisfied with the quality of the services provided.

Chapter six presents an in-depth discussion of the empirical results. The research objectives of the study and the hypotheses set out in Chapters one and four are discussed. The discussion begins with student and staff perceptions of tangibles, reliability, responsiveness, assurance and empathy quality variables pertaining to the service encounter. This expands into a discussion on student and staff expectations of tangibles, reliability, responsiveness, assurance and empathy quality variables pertaining to the service encounter. Lastly, the quality gaps found between the students and staff are presented.

Chapter seven commences with a summary of the major findings of the study arising from the literature review and the empirical study results. The immediate and future recommendations to University management follow. The most important contributions of this study are put forward. Lastly, areas for future research are outlined.

### **1.13 Summary**

This chapter provided an introduction and overview of the study. It shed light on the problem and sub-problems of the study. It identified the research objectives and research questions of the study, as well as the hypotheses being tested. It emphasized the motivation and need for such a study. This chapter also examined the methodology used for the study and lastly, it indicated the limitations of the study. The next chapter will set the theoretical foundation for the study. It will discuss the various aspects of service quality.

## **CHAPTER TWO**

### **LITERATURE REVIEW: CONCEPTUALIZATION OF QUALITY**

#### **2.1 Introduction**

The previous chapter provided an overview of the study. This chapter focuses on various aspects pertaining to service quality. The different models of service quality will be identified and probed and those adapted to the study will be clearly highlighted. Abundant research has been conducted on service quality in the commercial sector. This study highlights quality exponents and their contribution to service quality; the managerial, marketing and strategic issues associated with service quality. Further, improvement of service quality within service organizations; benchmarking and service blueprinting process analysis will also be described. The services provided by UKZN will also be examined in detail. The chapter concludes with a synopsis of research findings with respect to reviewing service quality within tertiary institutions in other parts of the world.

#### **2.2 Definitions, themes and benefits and importance of service quality**

##### **2.2.1 Defining service quality**

Service quality or “quality” is an abstract concept that is often difficult to define and quantify because it is context specific and means different things to different people. In this chapter the researcher will highlight the various definitions associated with service quality. Particular emphasis will be placed on tertiary education and UKZN in particular.

Before embarking on a definition of service quality it is important to describe the difference between a product and a service. According to Hoffman and Bateman (2006: 28-46), four of the unique characteristics that distinguish goods from services are services’ intangibility, inseparability, heterogeneity and perishability.

Zeithaml, Bitner and Gremler (2009: 6) indicate that the broad definition of services implies that intangibility is a key determinant of whether an offering is a service. Services tend to be more intangible than manufactured products and manufactured products tend to be more tangible than services.

Hoffman and Bateman (2006: 28) argue that of the four unique characteristics that distinguish goods from services, intangibility is the primary source from which the other three characteristics emerge. Services are performances rather than objects. As a result of their intangibility, services cannot be seen, felt, tasted, or touched in the same manner as physical goods.

Hoffman and Bateman (2006: 28) add that the inseparability of production and consumption refers to the fact that goods are first produced, sold and then consumed, whilst services are sold first and then produced and consumed simultaneously. Heterogeneity, another characteristic of a service, refers to the potential for service performance to vary from one service transaction to the next. Services are produced by people; consequently variability is inherent in the production process. Finally, perishability means that services cannot be saved; unused capacity in services cannot be reserved, and services themselves cannot be inventoried.

The following are various definitions of service quality:

- “Quality is a consumer-generated comparative judgement, since individuals have no implicit sense of quality unless a standard of comparison is provided” (Oliver, 1997: 163).
- Service quality is “the extent in which the service, the service process and the service organization can satisfy the expectations of the user” (Kasper, van Helsdingen, and de Vries, 1999: 188).
- “Perceived service quality is the result of the consumer’s comparison of expected service with perceived service” (Bojanic, 1991:29).
- Service quality is “the outcome of a process in which consumer’s expectations for the service are compared with their perceptions of the service actually delivered” (Mangold and Babakus, 1991: 60).

The concept of service quality therefore has different meanings and this creates debate on the area of service quality research. From a strategic perspective, these variations in meanings that university stakeholders hold of service quality make it difficult for university management to incorporate quality in their strategy and corporate culture in a holistic and synergistic manner.

David Garvin (1988), as cited by Lovelock and Wirtz (2007:411) outlined five perspectives of service quality. These are:

- The transcendent view of quality. This is synonymous with innate excellence; a mark of uncompromising standards and high achievement. The viewpoint is often applied to the performing and visual arts. It argues that people learn to recognise quality only through the experience gained from repeated exposure. However, from a practical point of view, this suggestion that managers or customers know quality when they see it is not very helpful.
  
- The product-based perspective sees quality as a precise and measurable variable. Differences in quality, it is argued, reflect differences in the amount of an ingredient or attribute possessed by the product. Since this view is totally objective, it fails to account for differences in the tastes, needs, and preferences of individual customers (or even entire market segments).
  
- The user-based perspective. This approach is based on the premise that quality lies in the eyes of the beholder. Such definitions equate quality with maximum satisfaction. This subjective, demand-orientated perspective recognizes that different customers have different wants and needs.
  
- The manufacturing-based perspective is supply-based and is concerned primarily with engineering and manufacturing practices (In services, one would say that quality is operations-driven). It focuses on conformance with internally developed specifications, which are often driven by productivity and cost-containment goals.
  
- The value-based perspective defines quality in terms of value and price. By considering the trade-off between performance (and conformance) and price, quality comes to be defined as “affordable excellence”.

Having considered the various service quality perspectives put forward by Gavin (1998), the researcher supports the user-based definitions of quality, as each student has a unique way of looking at the tertiary service quality they experience. The researcher also agrees with Harvey and Green (1993:12) who note that quality is often a relative concept. Quality is relative to the user of the term and the circumstances in which it is invoked.

The stakeholders of tertiary institutions include students, employers, teaching and non-teaching staff, government and its funding agencies, accreditors, validators, auditors, and assessors (including professional bodies). Each stakeholder has a different perspective on quality. For the

purposes of this study quality perceptions are looked at from the perspective of students and staff as they are both stakeholders within the University.

The researcher is also in agreement with the value-based definition of service quality. Harvey and Green (1993:13) observe that, “quality can be viewed as exceptional, as perfection (or consistency), as fitness for purpose, as value for money and as transformative.”

If the value-based concept were to be adapted by UKZN students who perceived the University’s service quality in terms of exceptional service offerings, embodying academic excellence and high standards within its academic programmes and research output, and being a highly-ranked academic institution with a reputable image, then the quality concept of the way students view the University would be enhanced.

Service quality from a provider’s perspective means the degree to which the service’s features conform to the organization’s specifications and requirements. From the customer’s perspective, service quality means how well the service meets or exceeds expectations (Fisk, Grove and John, 2004: 153). This argument can be applied to tertiary education services. Staff at a university needs to comply with the institution’s specifications and requirements pertaining to service quality in order to enhance it.

### **2.2.2 Themes associated with service quality**

As service marketing has evolved over time, more research has been conducted on quality and how it impacts on the customer. Since tertiary education forms part of service marketing it is important to identify its quality variables and understand how it affects students and staff within the university environment. Sultan and Wong (2011:11) argue that service quality research in higher education sector is new, at least when compared with the commercial sector.

Bateson (1992: 508) identifies service quality as more difficult for the consumer to evaluate than the quality of goods; service quality perceptions result from a comparison of customer expectations with actual performance and the quality evaluations are not made solely on the outcome of the service as they also involve evaluation of the process of delivery.

A good can be physically seen, tasted or touched, making it easier for the service user to ascertain its quality. On the other hand, the services offered to a student at university are intangible and this makes it difficult to ascertain their quality as compared to the quality of

goods. The student has to experience each aspect of the tertiary service experience before he/she can comment on the service.

Mazzarol (1998: 172) adds to the debate by arguing that education is a product that is both highly intangible and has characteristics that create special problems for marketing. According to Fisk et al (2004: 156), customers evaluate services differently from physical goods because services tend to be inherently low in search characteristics, but high in experience and credence characteristics. Search characteristics are attributes we can evaluate before a purchase, for example the colour of a car and its engine capacity. Experience characteristics are attributes we can evaluate only during, or after consumption. For example when the student registers at university, he/she can only comment on the experience during and after the consumption process. Kurtz and Clow (1998: 100) also indicate that credence characteristics are difficult to evaluate even after the service is complete. Consumer services such as accounting services, funeral services, education and veterinarian care are also illustrative examples.

According to Clow and Vorhies (1993: 22-23) “quality is the life-blood that brings increased patronage, competitive advantage and long term profitability”. Bateson (1992: 494) adds that service quality offers a way of achieving success among competing services. The researcher concurs with the above arguments in favour of service quality. In order to differentiate it from other tertiary institutions like the Universities of Zululand, Johannesburg, Cape Town or South Africa, UKZN has to offer something more and this can be achieved through excellence in service quality. Establishing itself as a university that has excellent service quality may be the only way UKZN can differentiate itself from other universities in South Africa.

Abdullah (2005: 32) argues that the pressures driving successful organizations towards top quality services make the measurement of service quality and its subsequent management of the utmost importance. In order to draw valued conclusions and measure the level of quality within a tertiary institution, research needs to be conducted among students and staff to ascertain their perceptions of service quality within the institution.

A crucial debate surrounding service quality is that the University as an organization needs to identify quality within its strategy and incorporate it within its corporate culture. In order for UKZN to be recognised as an institution of learning with high quality of excellence, it needs to have an organizational culture that embraces high service quality at all levels. In order for both academic and support staff to deliver consistent, satisfying experiences, high levels of service quality should form the building blocks to provide satisfying experiences to students.



Management and staff within the University need to understand students' perceptions and related expectations of the services being provided in order to deliver high quality services and enhance the overall learning experience within the tertiary environment. Contact staff is the drivers of service quality as it is they have initial or continued contact with the student. Therefore it is imperative that staff be aware of student perceptions during these interactions. According to Dastoor (2008: 29), perceptions formed during each contact with the customer will eventually be translated into a long-term partnership. Thus student demographics and behaviour patterns and an understanding of how to communicate the service experience to students effectively need to be recognized by staff as they interact with students during the delivery of the service. However, this is not as simple as it seems. Students have different perceptions and more often than not require individual attention from staff members. Furthermore, communicating with students from different cultures, races and with different ethnic backgrounds adds to the complexity.

Another aspect of service quality that Fisk et al (2004: 153) comment on is that it creates a chain reaction with regard to loyalty and customer inclination to establish enduring relationships with service providers. If universities provide high quality services, this can easily translate to long term loyalty on the part of their students. If the principle of creating a chain reaction that Fisk identified were to be adopted by UKZN, through providing high quality services to its loyal customers (the students that then stay on to complete their degrees or go on to do post-graduate degrees), then the service delivery link between the student (customer) and service organization would be established. If UKZN understands its loyal customers, this would put it in a favourable position to provide high quality services. In the long term this would strengthen the service delivery link between the loyal student population and the University.

Kurtz and Clow (1998: 110) comment that, in order to evaluate the quality of services, customers will compare the service they received with the service they expected. If service quality were to be calculated mathematically, the formula would be  $P-E$ , with  $P$  being the customer's perceived level of service received and  $E$  being consumer expectations prior to the service encounter. A negative number would indicate that expectations were not met. A zero would also indicate that consumer expectations were met. A positive number would indicate that consumer expectations were exceeded.

In examining the causes of service quality problems, a common theme is that management sometimes become so embedded in the service process that they do not question their assumptions. Secondly, managers can suffer from a predictable set of mental biases that makes it hard to process new information. Metters, King - Metters, Pulman and Walton (2006: 214)

argue that quality problems stem from the fact that managers do not understand variation well and they are distracted by their own, often unfounded, assumptions, thus making them susceptible to an array of mental biases that cause them to overvalue what they think they know.

### **2.2.3 Benefits and importance of service quality**

Universities should not merely adopt service quality; they should understand the benefits and importance of having high levels of service quality within their institutions that can accrue to them in the long term.

Kasper et al (2006: 176) highlight the following benefits that organizations having high quality service can achieve: Firstly, they are creating competitive advantage by insulating customers from competitors. This is due to customer inertia. If the service is perceived to be of equal or higher quality than that of competitors then there is no motivation for customers to defect, regardless of poaching tactics.

Secondly, high quality can contribute to lower customer recruitment costs due to positive word of mouth from existing customers who provide a free recruitment service for those organizations fortunate enough to have satisfied customers. Equally, by spending less on attracting new customers (because fewer of them defect to competitors), marketing expenditure can be directed at ensuring that existing customers are happy.

Thirdly, promoting positive word of mouth and reputation is another valued benefit. This occurs as customers talk about the service with others. Customers regularly poll other people in their work and social networks about consumption experiences, seeking reassurance that their provider is as good as everyone else's, the status associated of having found a better provider than others and alternative suppliers if current businesses are not providing satisfaction. Improved financial performance is a natural corollary of increased customer loyalty, reduced customer recruitment spend and positive word of mouth. Lastly, adopting high levels of service quality within a university can reduce staff turnover, which although widely canvassed has only limited empirical support. However, it is argued that, just when customers are more satisfied and less likely to complain, they also exhibit "helping" behaviours. They are more forgiving of service failures and the extended time provided by higher loyalty rates allows for more enduring service relationships.

Bhattacharjee (2010: 493) briefly illustrates the reasons for the importance of quality service within service organizations. Some of the advantages are related to the benefits discussed above. One of the most important advantages of high service quality is that it can lower costs. Higher quality of services implies fewer mistakes and repeat tasks, service recovery exercises or refunds to disgruntled customers. Preventive and corrective measures through quality control processes lower costs and increase productivity.

High service quality can immunize a service organization or make it less vulnerable to price wars. Service firms that are known for their high quality services have an additional differentiating attribute and can avoid the service commodity trap. They can afford to charge a higher price as they offer more benefits than the competition (Bhattacharjee, 2010: 493).

A further advantage is increased customer loyalty. Service quality ensures customer satisfaction, which in turn drives customer loyalty and enhances profits (Bhattacharjee, 2010: 493).

Furthermore, high service quality can result in increased market share. Loyal customers contribute to positive word of mouth publicity (the „buzz effect“), which broadens the customer base with minimal costs (Bhattacharjee, 2010: 493).

High service quality can build loyal internal customers. Employees for example, become proud of the firm for which they are working; having a sense of belonging is known to inspire the delivery of high quality services. Lower attrition rates reduce manpower and training costs and the service firm can leverage the knowledge and skill of its employees (Bhattacharjee, 2010: 493).

High service quality can also result in higher Return on Investment (RoI). The service-profit chain has established that high quality services contribute to higher profitability (Bhattacharjee, 2010: 493). Within a tertiary institution, the above benefits can represent crucial advantages if the institution provides a high quality service.

According to Laszlo (1999: 90), the foundation blocks for quality in a customer service organization are management commitment, customer focus, and employee involvement; operational and administrative aspects are built on these basic issues. However, these foundation blocks would not be present in a service organization such as UKZN if the staff and management do not understand the concept of service quality from the viewpoint of the student. Kurtz and Clow (1998: 102) add that it is the perceptions of the customer who is evaluating the quality of a service that matter, rather than what the service provider thinks. If the customer

perceives that he/she received poor service, the decision about future patronage will be based on that perception.

### **2.3 Relationship between service quality and satisfaction**

Given the crucial role that service quality plays in customer satisfaction it is important to discuss this relationship. According to Oliver (1997: 13) satisfaction is the consumer's fulfilment response. It is a judgement that a product or service feature, or the product or service itself, provides a pleasurable level of consumption-related fulfilment.

In simple terms, the above definition means that satisfaction is the customer's evaluation of the service in terms of whether that service has met his or her needs and expectations. If a customer is dissatisfied with the service, this means that the service provider has failed to meet their needs and expectations.

According to Zeithaml et al (2009: 104), customer satisfaction can be viewed as contentment, pleasure or ambivalence depending on the particular context or type of service. Zeithaml et al (2009: 105) go on to state that customer satisfaction is influenced by specific product or service features; perceptions of product and service quality; and price. This implies that perceptions of service quality have a direct bearing on the end result of customer satisfaction.

Kasper et al (2006: 182-182) comment that quality refers to some attribute of what is offered, provided and produced, whereas satisfaction or dissatisfaction refers to a customer's reaction to that offer. In this sense they are separate; quality is something that an organization is responsible for, whereas satisfaction is in the customer's domain. However, these two concepts are clearly related in that one might use customer response (satisfaction or dissatisfaction) as a means of assessing whether quality has been delivered. Hoffman and Bateman (2006: 333) argue that customer satisfaction is a short-term, transaction-specific measure, whereas service quality is an attitude formed by the long-term, overall evaluation of performance.

Hoffman and Bateman (2006: 333) further illustrate that customer satisfaction and service quality are intertwined. Some believe that customer satisfaction leads to perceived service quality, while others believe that high levels of service quality lead to customer satisfaction. For the purposes of this study, it is argued that high levels of service quality lead to customer satisfaction.

Brink and Berndt (2004: 62) identify three factors that have a direct impact on customer satisfaction. The first is emotional responses. The customer's emotional responses may affect his or her perceptions of satisfaction regarding a product or service. The researcher concurs with this argument. If a UKZN student is under stress, frustrated or angry, he or she would overreact over the smallest hitch in the service delivery process which would lead to negative perceptions of customer satisfaction.

The second factor identified by Brink and Berndt (2004: 62) is attributes that contribute to service success or failure. Attributes (the way in which the customer ascribes certain causes to the outcome of an event) also influence perceptions of satisfaction. The student who is surprised to learn that he or she has failed a course tends to look for reasons. Some of these could be that the student did not spend enough time preparing for the examination or did not attend lectures, or has no interest in the subject. The student's assessment can influence his or her levels of satisfaction with the University. In most instances the student will be dissatisfied with the University, while absolving him or herself of any blame.

Brink and Berndt (2004: 62) note that the third factor that contributes to customer satisfaction is perceptions of equity or fairness. If this factor was adopted by the students at the University, and if a student feels that he or she has been treated fairly and the lecturer has marked the examination papers in a consistent and fair manner, then his or her satisfaction level may be higher. The opposite is also true.

Brink and Berndt (2004: 59) argue that customers perceive services in terms of the quality of services provided and satisfaction obtained. These two concepts, service quality and customer satisfaction are the focus of attention for organizations because they need to quantify (measure) them. The reason for the focus on quality of service and customer satisfaction is the belief that organizations can differentiate themselves by means of providing better service quality and overall customer satisfaction.

Blem (1995: 14-16) identifies the benefits of providing superior customer satisfaction as follows:

- Less wasted effort: If the service provider knows its customers' wants and needs well, less time is wasted trying to work out what the customer requires from the service.
- By knowing its customers well, the firm can get down to basics more quickly, reducing the amount of money spent on market research surveys. For example, if UKZN lecturers understand their students' learning needs, they can pitch the course at the appropriate level.

- Customer loyalty: Experience has shown that satisfied customers are more loyal. A higher repeat rate leads to increased revenue and profit. For example, students who have completed their undergraduate degrees at the UKZN and who are satisfied with the level of service delivery would return to complete their post-graduate studies.
- Price advantage: It has been established that satisfied customers are willing to pay more for the satisfaction they derive from better services. Unfortunately, it is not easy to estimate how much extra they may be prepared to pay. This depends on many factors, such as whether customers are highly price sensitive, whether the market is competitive and the type of purchase. For example, if students are given a price reduction in the course they are studying if they acquire a distinction in that course, this will create satisfied students who would continue their studies at the University.
- Selling cost: Greater customer loyalty translates into lower sales expenses. Satisfied customers can also act as an unpaid sales force. They tell their friends, and since they have no vested interest in the product or service they are recommending, their friends believe them.
- Brand switching: Satisfied customers are less likely to change to a competitor's product or service.
- Taking the customer for granted: If a service organization takes its customers for granted, they can lose their customers to their competition. It is thus wise for service providers to always talk to their customers and maintain a good relationship with them so that they are satisfied with the level of service provided.

Brink and Berndt (2004:74) identify sources of customer satisfaction/dissatisfaction in the service encounter. The first is recovery. This includes all incidents where the service delivery system has failed in some way and an employee has to respond to customer complaints. The way the employee responds, in terms of content and form, leads to a favourable or unfavourable memory of the incident. The second theme is how adaptable the service delivery system is when the customer has special needs or requests. The customer will either perceive that something special is being done for them based on their needs, or they will be frustrated by the unwillingness of the organization to try to adapt to or accommodate their needs. Spontaneity is the third theme; this encompasses pleasant surprises for the customer, such as special attention or something being done that was not requested. Dissatisfactory incidents often include negative or rude behaviour towards the customer. Coping is the last theme; this revolves around the customer being unco-operative, where the service provider could do nothing that would satisfy them. Coping is the way employees handle these supposed "problem" customers.

Studies have been undertaken on customer satisfaction in the banking, retailing, franchising, hotel and hospitality, government municipalities and e-businesses to name, but a few. A common theme emerged – that service quality has a direct bearing on customer satisfaction and continued customer loyalty. In this study, these themes will be investigated and students and staff at the five UKZN campuses will be surveyed on quality dimensions and how they affect their service experience in order to establish whether they enhanced customer satisfaction.

## **2.4 Models of service quality**

Over the years, various scholars have conducted research on quality. Some of the pioneers in this field developed service quality model which will be expanded on in the discussion that follows. Six of the key models highlighted in this study are: the Disconfirmation of Expectations Model developed by Oliver (1977; 1980 and 1981), the Nordic Model developed by Gronroos (1984); the Six Sigma Model of service quality developed by Motorola in the 1980s; the SERVQUAL and Gaps model developed by Parasuraman, Zeithaml and Berry (1985, 1988, 1991); and the Three-Component Model developed by Rust and Oliver (1994). The discussion of the various models illustrates how service quality has evolved over the years. The different model builders used the initial research on quality theories to build upon and expand their models. This study used the SERVQUAL and Gaps model as it was easy to adapt to the tertiary education sector and many other theorists supported this model.

### **2.4.1 The Disconfirmation of Expectation Model**

The Disconfirmation of Expectation Model proposes three determinants of customer (dis)satisfaction namely: expectations; perceptions; and (dis)confirmation. Oliver (1977; 1980 and 1981) who developed this model claimed that before customers purchase a product or a service, they hold expectations about that product or service in their minds. These expectations could then be used as a standard or frame of reference against which service performance is judged.

Bennett, Bove, Dann, Drennan, Frazer, Gabbot, Hill, Lawlwy, Matear, Perry, Sparks, Summers, Sweeney, Ward and White (2003: 79) comment that, conceptually, there are three outcomes of the above model. If the service performance exceeds pre-purchase expectations, positive disconfirmation results, and customers are likely to demonstrate a high level of satisfaction. In other words the customer is pleasantly surprised. For example if Toyota includes a free car wash

with motor vehicle servicing, customers will be very pleased. The second possible outcome occurs when a service experience simply meets customer's expectations, confirmation occurs and the consumers are merely satisfied. For example when patronizing a Kentucky restaurant, consumers know what to expect in relation to service quality. Lastly, if the service experience does not meet, or is below the consumer's expectations, negative disconfirmation results and consumers are dissatisfied. For example, the Transnet strikes in South Africa in May 2010 resulted in the train services being shut down in Gauteng; this resulted in very dissatisfied train commuters.

#### **2.4.2 The Nordic Model of service quality**

Gronroos was one of the founding fathers of service quality research. Abu (2004: 635) states that some of the earliest research on service quality dimensions was undertaken by Gronroos (1984). Gronroos (1984) postulated that the perceived quality of a service is affected by the experience that the customer had. Therefore, he stated that the perceived quality of a given service is the outcome of the evaluation process, i.e. a comparison between the customer's expectations of the service and the perceptions of the service he/she received. He also pointed out that expectations are influenced by tradition, ideology, word of mouth communication, and previous experience with the service, as well as the customer's perception of the service itself.

Gronroos's model (1984) identified two types of service quality. Technical quality involves what the customer is actually receiving from the service, and functional quality refers to the manner in which the service is delivered.

Bateson (1992: 509), citing an unpublished paper by Lethinen and Lehtinen (1982), observed that the basic premise underlying service quality was that it produced an interaction between a customer and elements in the service organization. The authors used three quality dimensions: physical quality, which includes the physical aspects of the service (equipment and building); corporate quality, which involves the company's image or profile; and interactive quality, which is derived from the interaction between contact personnel and customers or the interaction between some customers.



### **2.4.3 The Six Sigma Model of Service Quality**

The Six Sigma Model is a highly structured and integrated programme for developing customer-orientated business processes. The model was developed by Motorola in the 1980s. The Six Sigma Model relates to the elimination of defects. The aim is to achieve six sigma deviations from the mean, which represents 3.4 defects per million. The reason for including this model in this study is that defects have been broadly defined to include defects in service processes and within the methodology. The critical driver is not just to perform without fault, but to perform according to customer determined criteria. It is therefore important to map the specific processes involved in delivering service to the customer. Hence a large part of the Six Sigma Model involves process mapping. While grounded in manufacturing, it has been applied to many large service organizations and it is likely to emerge among some of the major global service providers over the next few years. The method is based on a five-part process: define, measure, analyse, improve and control (or DMAIC). The first stage is dependent on the “critical to quality” (or CTQ) metric which is the customer’s definition of what is most relevant to them. The organization determines which activities drive the CTQs and works backwards through these processes to analyse their systems, set performance metrics and implement process controls to ensure customer orientated performance (Kasper et al, 2006: 197-198).

### **2.4.4 The SERVQUAL Model**

Before embarking on a discussion of the SERVQUAL model, it is important to indicate its relevance to this study. This model of service quality is the foundation upon which this research is based. The variables pertaining to the tertiary education sector were adapted to the SERVQUAL instrument. The discussion on the model tests the quality variables like reliability, responsiveness, assurance, tangibles and empathy which are all applied to the study. The discussion on how the SERVQUAL model was developed and expanded upon by Parasuraman, Zeithaml and Berry is set out below.

The SERVQUAL Model was developed by Parasuraman, Zeithaml and Berry who supported Gronroos’s findings. These findings were based on three underlying themes, namely:

- 1) service quality is more difficult for the customer to evaluate than goods quality;
- 2) service quality perceptions result from a comparison of customer expectations with actual service performance; and
- 3) quality expectations are not based solely on the outcome of the service; they also involve evaluation of the process of the service (Parasuraman et al, 1985:42).

Kasper et al (2006: 190) argue that the full SERVQUAL Model contains a large part of the Disconfirmation Model, i.e. service quality is derived from the disconfirmation between expected service and perceived service.

Research conducted by Parasuraman, Zeithaml and Berry identified 10 criteria that customers use to judge the quality of service that they receive, namely:

- Reliability: This relates to the ability of the service provider to perform the promised service dependably and accurately.
- Access: Is the service accessible and delivered without the customer waiting too long?
- Security: Is the service free from danger, risk or doubt?
- Credibility: How trustworthy and honest does the service provider appear to be?
- Understanding the customer: How much effort does the organization make to get to know its customers and understand their needs?
- Responsiveness: How willing are service employees to help customers, and to deal with their specific problems?
- Competence: To what extent do staff possess the required skills and knowledge to perform the services?
- Courtesy: Are staff polite and considerate to consumers?
- Tangibles: What assessments can be made of the appearance of the physical facilities, equipment and personnel and communication materials?
- Communication: How good is the organization at effectively communicating what the service provides and what role customers are expected to play? Specifically, are customers kept informed about reasons for possible breakdowns in the delivery system?

(Parasuraman, et al, 1985:41- 50)

After further research Parasuraman, Zeithaml and Berry (1985) collapsed the above ten dimensions of service quality into five, namely:

- Tangibles: including the physical components of the service, e.g. seating, lighting, etc.
- Reliability: dependability of the service provider and accuracy of performance.
- Responsiveness: promptness and helpfulness.
- Assurance: knowledge and courtesy of employees and their ability to inspire trust and confidence.
- Empathy: caring, individualized attention to customers.

The SERVQUAL Model identifies and tests the five dimensions of quality, namely: tangibles, reliability, responsiveness, empathy and assurance. The discussion below highlights each quality variable in detail.

Tangibles are the physical facilities, equipment and appearance of staff of an organization (Parasuraman et al, 1985: 41- 45).

According to Bennett et al (2002: 86), strategies relevant to managing the intangibility of services include:

- considering the impact of the servicescape, including buildings, interior, exterior, furniture, equipment, colours; and
- giving customers tangible items as a record of the service transaction, for example brochures, business cards, receipts and documents.

Reliability refers to the firm's ability to deliver a promised service dependably and accurately (Parasuraman et al, 1985:41- 45). According to Bennett et al (2002: 85), useful strategies for ensuring the reliability of the core service include:

- understanding customers' needs and wants through market research;
- developing systems and procedures that standardize service production to ensure that the core service is delivered as reliably and consistently as possible;
- making sure that the promises made in marketing communication are realistic and achievable; and
- managing customer expectations of the reliability of the service.

Responsiveness refers to the service provider's willingness to help customers and provide prompt service (Parasuraman et al, 1985: 41- 45).

According to Bennett et al (2002: 86), strategies aimed at increasing responsiveness include:

- individualizing or customizing the service as much as possible;
- determining how the service process and outcome are viewed by the customers;
- implementing standard procedures to maximize responsiveness to service situations that may occur reasonably regularly;
- training staff well, so that they can respond when necessary;
- developing procedure manuals to help staff respond to customer questions, complaints and requests; and

- ensuring that customers do not have to wait too long for assistance or to receive the service.

Assurance refers to the knowledge and courtesy of employees and their ability to inspire trust and confidence (Parusaraman et al, 1985: 41- 45).

According to Bennett et al, 2002: 85), strategies useful for assuring customers and reducing the perceived risk associated with the purchase and consumption of services include:

- creating trust and confidence through the knowledge and skills of contact personnel
- creating continuity of service staff;
- creating an organization-wide image that reflects the core values of the organization;
- building a strong corporate brand image; and
- using cues such as employee dress, appearance of the interior and exterior of the firm, employee attitudes, visible qualifications and credentials, and pleasant surroundings to reassure the customer.

Empathy is demonstrated by giving caring, individualized attention to customers (Parusaraman et al, 1985: 41-45). According to Bennett et al (2002:86), strategies that can be used by service firms to show empathy include:

- tailoring service offerings to individual customers as much as possible;
- making customers feel important by developing long-term relationships, as long as the service situation suits relationship building and the customer wants to maintain a relationship with the service provider;
- making customers feel important by responding to their needs and understanding their concerns;
- training staff to be empathetic towards the needs of customers; and
- training staff to know customers by name and by their service needs.

Valerie Zeithaml (1984-1986) and her colleagues developed the SERVQUAL Model to measure customer satisfaction with various aspects of service quality. According to Lovelock and Wirtz (2007: 420), in its basic form the SERVQUAL Model contains a scale of 22 perception items and a series of expectation items, reflecting the five dimensions of service quality, namely tangibles; reliability; responsiveness; assurance and empathy. However, despite the SERVQUAL Model being widely used by service companies it does have limitations. According to Lovelock and Wirtz (2007: 420) the major limitation of the model is that the majority of researchers using SERVQUAL have omitted from, added to, or altered the list of statements purporting to measure service quality.

In this study, the research questionnaires for both staff and student respondents were developed using the SERVQUAL Model. This model was expanded upon and adapted to the tertiary education variables that tested service quality within UKZN. In this study, five aspects of service quality were tested namely: tangibles, assurance, responsiveness, reliability and empathy.

The SERVQUAL Model has been widely used in the industrial sector. According to Ladhari (2008: 66), it has also been used to measure service quality in various service industries, including health care, banking, fast food, telecommunications, retail chains, information systems and library services. The literature reviewed by the researcher revealed that the SERVQUAL model has been used in the following industries: the health care-industry (Chaturvedi, 2001); retail chains (Parasuraman, et al, 1994); tourism (Chand, 2010), hospitality (Almossawi, 2011); banking (Ravichandran, et al, 2010); information systems (Jiang, Klein and Crampton, 2000) and higher education (Tan and Kek, 2004).

Ladhari (2008: 66) adds that the SERVQUAL Model has been applied in various countries including the United States (Babakus and Boller, 1992; Pitt et al, 1995); China (Lam, 2002; Zhou, Zhang and Xu, 2002); Australia (Baldwin and Sohal, 2003); Cyprus ( Arasli et al, 2005); Hong Kong (Kettinger et al,1995); South Africa (Pitt et al, 1995); the Netherlands (Kettinger et al, 1995) and the UK (Pitt et al, 1995).

The discussion below focuses on the major criticisms and benefits of organizations using this model to measure their service quality. Before choosing this model for the study, due consideration was given to criticisms and benefits before designing the questionnaire along the dimensions required for the SERVQUAL Model.

Kasper et al (2006: 197) summarize the major criticisms of the SERVQUAL instrument as follows:

- the basic question of whether it is necessary to measure expectations at all;
- the way expectations are measured;
- the reliability and validity of using difference scores;
- the dimensionality of the SERVQUAL Model; and
- the number of scale items in the SERVQUAL Model.

The main benefit of the SERVQUAL Model as a measuring tool is the ability it gives researchers to examine numerous service industries such as healthcare, banking, financial and education. Kasper et al (2006) also commented that the problem was not with the SERVQUAL Model measures, but with the manner in which researchers used the tool.

According to Solomon (1993:10 -15) total quality within tertiary institutions is much wider and deeper than a quality assurance system. It involves a change in mindset. While many organizations have been able to establish a quality system which identifies key service delivery processes and benchmarks, they often find it difficult to change employees' attitudes about quality.

Hitman (1993), Soutars (1996) and Oliveira and Ferreira (2009) favour the use of the SERVQUAL Model in higher education studies. Soutars (1996: 75) indicates that there is merit in evaluating the performance of tertiary education institutions with a service marketing instrument such as the SERVQUAL Model. Hittman (1993: 77- 80) further suggests that the use of the SERVQUAL Model would seem rational as it not only evaluates the teaching component of a tertiary institution, but includes aspects of the total service environment experienced by the student. The researcher used the SERVQUAL Model for this study since this model encompassed the total service environment experienced by students and not just the teaching component.

According to Baron and Harris, (1995:162), Parasuraman, Zeithmal and Berry found that customers judge the quality of a service by comparing the service they actually receive along the five quality dimensions with what they expected to receive.

Furthermore, Baron and Harris (1995: 162) identified four key factors that may influence customers' expectations which can be adapted to this study. They are as follows:

- Word of mouth communication: within the UKZN what other students or more specifically what a student's friends think of the University has an influence on their expectations.
- Personal needs and expectations: whether a student thinks, for example, that female academics make better lecturers since they are more sensitive and nurturing than their male counterparts.
- Past experiences: for example, a commerce student on the UKZN Westville would expect the library to have copies of their prescribed textbooks, since this service is offered at the Westville campus library.

- External communications: advertising the MBA degree at UKZN in the *Sunday Times* may lead to some students who want to register for the degree making inferences about the quality of the degree before they become part of the program.

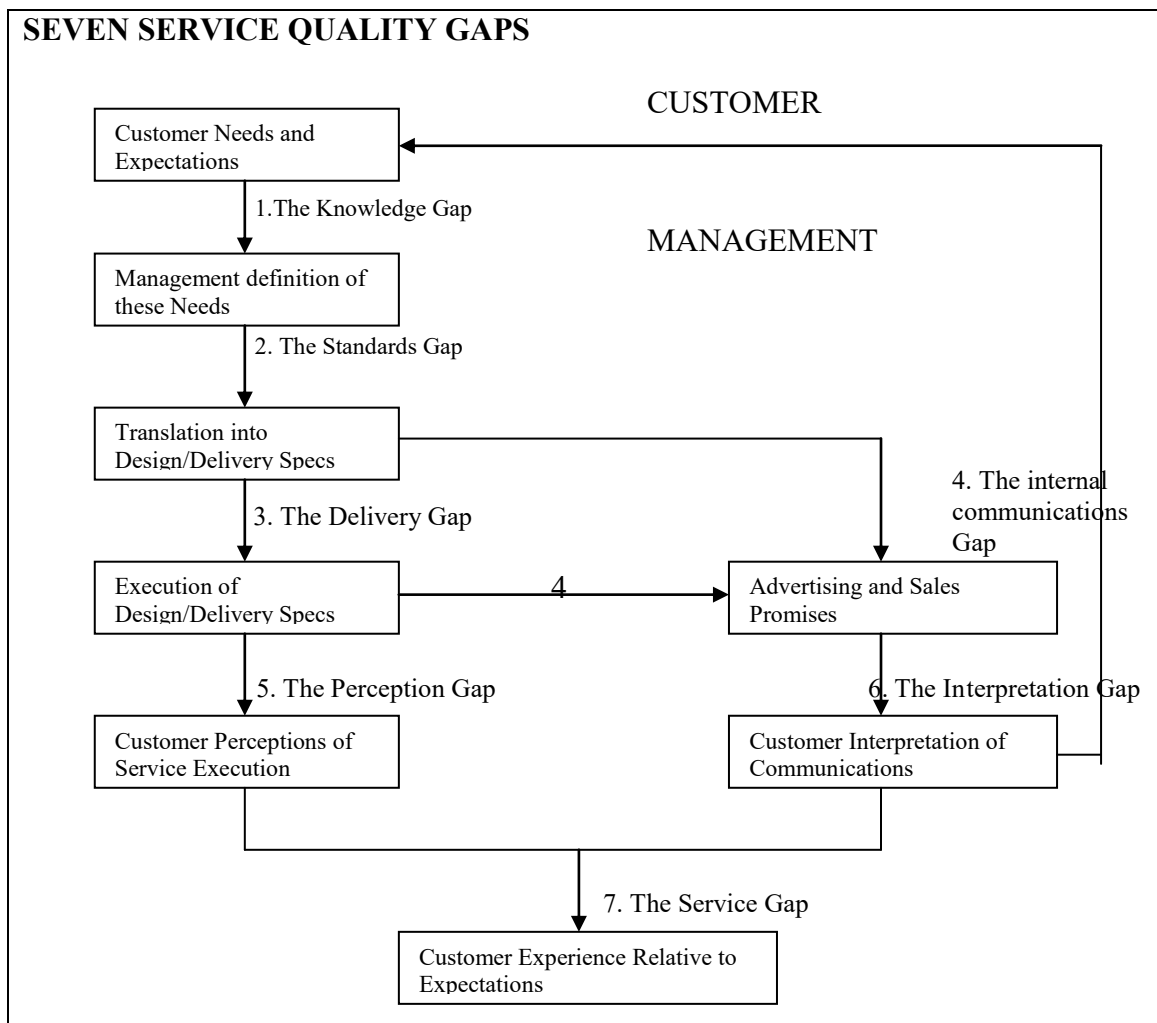
According to Ladhari (2008), the measurement of service quality has received significant attention from scholars and practitioners in recent years. The SERVQUAL Model, which was designed to be a generic instrument applicable across a broad spectrum of services, has been extensively used, replicated, and criticised.

#### **2.4.5 The GAPS Model**

The foundation of this study is based on the GAPS model. Zeithaml, Berry and Parasuraman developed the GAPS model (1984-1986) that is used in conjunction with the SERVQUAL instrument. This model identified four potential gaps within a service organization. According to Metters (2006: 185), Parasuraman and colleagues (1985) conducted studies in several industry sectors to develop and refine SERVQUAL, a multi-item instrument to quantify customers' global (as opposed to transaction-specific) assessment of a company's service quality. Their model is commonly known as the GAPS model. Their scale involved expectations – perceptions gap scores along five dimensions: reliability, responsiveness, assurance, empathy and tangibles. When Zeithaml, Parasuraman, and Berry asked more than 1 900 customers of five nationally recognized companies to allocate 100 points across the five service quality dimensions, they averaged as follows: reliability 32%, responsiveness 22%, assurance 19%, empathy 16%, and tangibles 11%. Although customers consistently reported that their most important quality dimension was reliability, this seems to be the area where many service companies failed. The SERVQUAL Model conceptualized service quality on the basis of the differences between customers' expectations with respect to the five dimensions and their perceptions of what was actually delivered.

When a difference exists, it is characterized as a "gap". The model was fashioned after remarkably consistent patterns emerged from the interviews conducted for the study. Although some perceptions about service quality were specific to the industries selected, commonalities prevailed among the industries. These commonalities suggested that a general model of service could be developed. The most important insight obtained from analyzing the responses was that "a set of key discrepancies or gaps" existed regarding perceptions of service quality and the tasks associated with service delivery to customers.

The diagrammatic representation of the GAPS model follows and the discussion below expands on what these gaps are and how they can be closed.



Source: The 7-gaps model by Christopher Lovelock, *Product Plus* (New York: McGraw Hill, 1994:112).

Kasper et al (2006: 192) discuss the Gaps model developed by Zeithaml and her colleagues as follows:

- GAP1: consumer expectation-management perception gap. In formulating its service delivery policy management does not correctly perceive or interpret consumer expectations.
- GAP2: management perceptions-service quality specifications gap. Management does not correctly translate the service policy into rules and guidelines for employees.
- GAP3: service quality specifications-service delivery gap. Employees do not correctly translate rules and guidelines into action.



- GAP4: service delivery-external communications gap. External communications promises made to customers do not match the actual service delivery.

Lovelock and Wirtz (2007: 424) identify seven types of gaps that can occur at different points during the design and delivery of service performance as follows:

1. The knowledge gap is the difference between what service providers believe customers expect and customers' actual needs and expectations.
2. The standards gap is the difference between management's perceptions of customer expectations and the quality standards established for service delivery.
3. The delivery gap is the difference between specified delivery standards and the service provider's actual performance on these standards.
4. The internal communications gap is the difference between what the company's advertising and sales personnel think are the product's best features, performance, and service quality level and what the company is actually able to deliver.
5. The perceptions gap is the difference between what is, in fact, delivered and what customers perceive they received (because they are unable to evaluate service quality accurately).
6. The interpretation gap is the difference what a service provider's communication efforts (in advance of service delivery) actually promise and what a customer thinks was promised by these communications.
7. The service gap is the difference between what the customers expect to receive and their perceptions of the service that is actually delivered.

Lovelock and Wirtz (2011: 410-411) goes on to offer prescriptions for closing the seven service quality gaps highlighted above. They are as follows:

### **Gap 1: The knowledge gap**

Prescription: Learn what customers expect

- Sharpen market research procedures, including questionnaire and interview design, sampling and field implementation, and repeat research studies periodically.
- Implement an effective customer feedback system that includes satisfaction research, complaint content analysis, and customer panels.
- Increase interactions between managers (middle and top management) and customers.
- Facilitate and encourage communication between front-line employees and management.

## **Gap 2: The standards gap**

Prescription: Establish the right service processes and specific standards

- Get the customer service processes right.
- Use a rigorous, systematic, and customer-centric process for designing and redesigning customer service processes.
- Standardize repetitive work tasks to ensure consistency and reliability by substituting hard technology for human contact and improving work methods (soft technology).
- Set, communicate, and reinforce measurable customer-orientated service standards for all work units.
- Establish a set of clear service quality goals for each step in service delivery that are challenging, realistic and explicitly designed to meet customer expectations.
- Ensure that employees understand and accept goals, standards and priorities.

## **Gap 3: The delivery gap**

Prescriptions: Ensure that performance meets standards

Ensure that customer services teams are motivated and able to meet service standards:

- Improve recruitment with a focus on employee-job fit; select employees for their abilities and skills to perform their job well. Train employees on the technical and soft skills needed to perform their assigned tasks effectively, including interpersonal skills, especially for dealing with customers under stressful conditions.
- Clarify employees' roles and ensure that they understand how their jobs contribute to customer satisfaction; teach them about customer expectations, perceptions, and problems.
- Build cross-functional service teams that can offer customer-centric service delivery and problem resolution. Empower managers and employees in the field by pushing decision-making power down the organization. Measure performance; provide regular feedback, and reward customer service team performance as well as individual employees and managers for attaining quality goals.
- Install the right technology, equipment, support processes, and capacity. Select the most appropriate technology and equipment for enhanced performance.
- Ensure that employees working on internal support jobs provide good service to their own internal customers/ front-line personnel.
- Balance demand against productive capacity.

- Manage customers for service quality.
- Educate customers so that they can perform their roles and responsibilities in service delivery effectively.
- Educate, control, or terminate jay customers who negatively affect other customers, employees, service processes, or facilities.

#### **Gap 4: The internal communications gap**

Prescriptions: Ensure that communications promises are realistic

- Educate managers responsible for sales and marketing communications about operational capabilities: Seek inputs from frontline employees and operations personnel when new communication programs are being developed. Let service providers preview advertisements and other communications before customers are exposed to them. Get sales staff to involve operations staff in face-to-face meetings with customers. Develop internal educational and motivational advertising campaigns to strengthen functions, and to standardize service delivery across different locations.
- Ensure that communications content sets realistic customer expectations.

#### **Gap 5: The perception gap**

Prescription: Tangibilize and communicate the service quality delivered

- Develop service environments and physical evidence cues that are consistent with the level of service provided.
- For complex and credence services, keep customers informed during service delivery on what is being done, and give debriefings after delivery so that customers can appreciate the quality of service they receive.
- Provide physical evidence (e.g. for repairs).

#### **Gap 6: The interpretation gap**

Prescription: Make specific promises and manage customers' understanding of communication

- Pre-test all advertising, brochures, telephone scripts, and web site content prior to external release, to determine if the target audience interprets them as the firm intends (if not, revise and retest).
- Ensure that advertising content accurately reflects those service characteristics that are most important to customers.
- Let customers know what is and is not possible and the reasons why.

- Offer customers different levels of service at different prices, explaining the distinctions.
- Identify and explain in real time the reasons for shortcomings in service performance, highlighting those that cannot be controlled by the firm.
- Document precisely:
  - Upfront, what tasks and performance guarantees are included in an agreement or contract;
  - After, what work was performed in relation to a specific billing statement.

### **Gap 7- The service gap**

Prescription: Close gaps 1-6 to meet customers' expectations consistently

- Gap7 is the accumulated outcome of all preceding open gaps. It will be closed when Gaps 1 through 6 have been addressed, (Lovelock et al, 2011: 410-411).

According to Bennett et al (2003: 83) the Gaps model emphasises that managers must understand what customers expect from the service experience. They must also understand the barriers that prevent the firm from meeting the needs of its customers.

The researcher is in agreement with Bennett et al, as were tertiary institutions were to identify the gaps in the service delivery process, they could gain valuable insight into improving overall service quality within their environment.

Hoffman and Bateman (2006: 356) also argue that firms that excel in service quality do so by avoiding potential quality gaps in their delivery system. Numerous managerial, marketing and operational factors influence the size of each of these gaps.

The researcher is in agreement with the above argument and notes that in order to excel in a campus environment, potential gaps in the service delivery system need to be avoided.

The HEdPERF (Higher Education Performance) is an instrument of service quality that emanated from SERVQUAL Model. According to Abdullah (2006: 569) it is a new measuring instrument that captures the authentic determinants of service quality within the higher education sector. The proposed 41-item instrument tested six dimensions namely, non-academic aspects, academic aspects, reputation, access, programme issues and understanding.

The researcher did not opt to use this instrument, but instead adopted the SERVQUAL instrument, as it could be used on both students and staff at the university.

#### **2.4.6 The Three-Component Model**

This model developed by Rust and Oliver (1994) includes factors relating to the service product, service delivery and service environment. According to Bennett et al (2003: 89) the implications of this model are that organizations can target these three main elements of service quality to improve overall service quality perceptions. The model assists towards a better understanding of how service quality works and suggests the elements on which managers should base service quality research. Management would need to develop surveys that reflect the above three dimensions in their specific industries to properly assess customers' service quality perceptions.

Having discussed the various models of quality, the various arguments and philosophies of modern quality practitioners surrounding quality within the organization are now discussed.

#### **2.5 Other quality practitioners and their contribution to quality research**

Five quality practitioners will be discussed, namely: Deming, Juran, Crosby and Peters and Waterman. Deming's philosophy on quality revolved around the belief that happy people, delighted by what you have provided, become loyal customers of your organization.

According to Cartwright (2000: 50), Deming's identified the following 14 attributes of quality:

##### **1. Constancy of purpose**

Quality is a constant process. There are no times when one does quality work and times when just anything will do. Quality, like customer relations, is an attitude, a way of thinking.

##### **2. A new philosophy**

Building on point 1, if quality is an attitude, organizations need a new philosophy that will not tolerate anything less than the best. If an organization expects the best, it tends to get the best and if it expects the worst, then the worst will happen.

### 3. Removing mass inspection

If quality is built into every stage of a process, the costly need for mass inspection of both tangible artefacts and intangible procedures will be removed. Work with quality circles has shown that those delivering a particular product, component or service are best placed to ensure quality. If someone else inspects for quality, it becomes that person's concern and therefore quality should and must concern all those employed by an organization.

### 4. Reliability of suppliers

Quality is the concern of everybody in the value chain up to the final customer. It is therefore to an organization's advantage to work closely with suppliers and to insist on a consistent standard of delivery.

### 5. Constant improvement

Deming makes the point that organizations should be constantly looking to improve. Even if it is not possible to improve (which is rarely the case), it is still worth analyzing the processes and products to see where value can be added.

### 6. Training

An organization committed to quality needs to provide constant training to its staff to ensure that their skills are updated. The costs incurred in effective training are never wasted and can help ensure that staff can meet and exceed customer expectations.

### 7. Leadership

Deming saw managers as people who were there to help others do their jobs properly. He saw the leader's primary role as that of ensuring that the systems in place in an organization helped the workforce to produce a high quality standard. Quality must pervade an organization and it requires both a top-down and a bottom-up approach. Senior management needs to create an environment where employees can take responsibility for their own quality issues.

### 8. Removing fear

A suitable environment for quality is difficult to sustain in a blame culture. Fear is not conducive in producing products and services that delight the customer. Fear will never encourage staff to go the extra mile or to develop new products and services. This can only be achieved in an environment where blame is not used as a punishment.

### 9. Pulling down barriers

Departmental and other organizational barriers can prevent a quality culture from pervading the organization. Involving everybody in a quality culture gives everybody shared ownership of quality issues.

#### 10. Eliminate sloganizing

Deming believed that slogans without the necessary resources in the value chain were of little value and could lead to harmful frustration.

#### 11. Removing quotas

Deming believed that everyone should work towards his or her capacity with quality, rather than quantity being the prime factor. This proved to be one of the most controversial of his 14 points.

#### 12. Pride of workmanship

Engendering pride in a product or service should be the goal of every manager. If workers feel that they belong to an organization, they are more able to empathize with its values; if quality is one of these values then quality will pervade the workplace. Pride in workmanship comes from within; it comes from people who care.

#### 13. Self-improvement

Deming made the point that it is not only the product or service that merits continuous improvement; the people making and delivering the product or service should also undergo such improvement. A well-developed workforce understands the environment within which the organization operates.

#### 14. Transformation is everybody's responsibility

Everybody means everybody: senior managers, middle managers, clerks, salespeople, operators, cleaners, all have a role to play in the quality process. For example, a dirty floor may lead to accidents that lead to a bad product or a badly answered telephone can lead to a lost order. Quality is everybody's responsibility and everybody should be given the opportunity to enhance their quality and customer care skills. Even if they never meet an external customer, they are all part of the internal customer value chain.

The second quality practitioner, Joseph Juran emphasized the need for a systematic approach to quality and developed what has become known as the Juran trilogy; quality control, quality planning and quality improvement. According to Cartwright (2000: 53), Juran made the point that quality is not free. However, the additional income that quality products and services

provide, together with the decrease in expenditure rectifying errors would normally lead to a positive gain.

Juran identified 10 steps that are required to deliver quality products and services. These are:

Step 1: Develop awareness of the need and opportunity for improvement

Step 2: Set goals for improvement

Step 3: Design and set up the organization to reach those goals

Step 4: Train staff

Step 5: Solve problems using a project approach

Step 6: Report progress on a regular basis

Step 7: Recognize people who produce quality

Step 8: Communicate results

Step 9: Keep scores

Step 10: Maintain the momentum of improvement (Cartwright, 2000: 53).

Philip Crosby is the third quality practitioner identified. According to Cartwright (2000: 53-54), Crosby propounded the “zero defect” approach. In stressing zero defects he makes the very important point that nobody should make do with second best. The more people strive for zero defects, the closer they will be to reaching the goal. It should be stressed, however, that the zero defect approach is most suited to manufacturing. Crosby’s ideas centred around four basic principles, namely; a common definition of quality; a system to manage quality; zero defects as the aim; and quality being effectively free.

Crosby’s 14 steps on Quality are as follows:

1. There must be managerial commitment to quality
2. The use of quality improvement teams
3. Measurement of quality should be displayed for all to see
4. The definition of the cost of quality should be used as a managerial tool
5. Communication of quality awareness throughout an organization
6. Systematic problem solving
7. Adopt a zero defect approach
8. Train supervisors to run quality improvement programmes
9. Run special zero defect events
10. Set quality goals
11. Develop an effective communication system
12. Appreciation of those who deliver quality



13. Set up quality councils
14. “Do it over again”- improvements must be continuous (Cartwright, 2000: 53-54).

Peters and Waterman are the fourth and fifth quality practitioners who have contributed to service quality research. According to Cartwright, (2000: 54-55) Peters and Waterman’s studies concluded that there were eight basic attributes of excellent companies, backed up by seven basic beliefs. These beliefs are: a belief in being the best; a belief in the importance of getting the details right; a belief that the people who work for the organization are at the heart of its success; a belief in superior quality and service; a belief in encouraging innovation and tolerating failure where this is a genuine effort to move the organization forward; a belief in the importance of internal communications; and a belief in the need for the organization to grow economically.

Supported by the above seven beliefs an organization should demonstrate the following eight attributes:

- Bias for action - they are proactive rather than reactive.
- Closeness to the customer - Tom Peters coined the phrase “Management By Wondering Around” (MBWA) and stressed the importance of talking to customers to understand their current wants and needs.
- Autonomy and entrepreneurship - an excellent organization realising the importance of its entire staff making a hands-on contribution.
- Value driven - all staff within the organization understands its core values and beliefs.
- Stick to the knitting - the organization must stick to what they do best in that industry.
- Single form, lean staff - organizations should have simple structures.
- Productivity through people – this ensures that internal customers know what is happening and share in good external customer comments.
- Simultaneous loose- tight properties – this give staff at the customer interface as much flexibility as possible but maintains close control of the core values (and finances) of the organization (Cartwright, 2000: 54-55).

## **2.6 Managerial issues associated with service quality**

Various management issues are associated with service quality. The following discussion highlights management’s need to develop a culture of service quality; ethics, developing a customer relationship management system and “Return on quality” (ROQ).

In any well-established service organization, management needs to emphasise the development of a culture of service quality from the outset. Metters et al (2006: 196) argued that companies who regularly deliver quality services usually have a corporate culture that encourages and supports quality throughout the company. Beginning at the very top and moving down through the ranks to the newest employee, these companies not only “talk the talk” but also enthusiastically “walk the walk” together as a team. The same concept can be carried through to tertiary institutions. Management, together with staff at all levels should pride themselves on serving the university with pride and confidence and approaching students and other key role players in the tertiary sector with helpfulness and integrity. In order to develop a culture of quality, management should employ the right people; educate and train their staff well; allow staff to fix anything; recognize and reward staff regularly; and lastly, be open to staff about everything.

Since managers and their respective staff are drivers of a positive quality culture, it is important that the way in which staff perceives quality also be taken into account. Scheider and White (2004: 100) suggest that if employees perceive that they are rewarded for delivering quality services, if management devotes time, energy and resources to service quality and when employees receive the training they require to effectively deal with diverse customers, a positive service climate is more likely to prevail.

Metters et al (2006: 196 -199) comment that companies that provide not just good services, but outstanding services, have H.E.A.R.T in their corporate culture.

According to Metters et al (2006: 196-199), such companies live and breathe the philosophy of:

Hire the right people and treat them with respect. An analysis of successful service companies reveals cultures that value each employee. Quality cultures recognize the need to hire the best people the organization can find who already support its corporate values and then train them for the skills the organization needs. It is important to find people with the right spirit, who are people-oriented, outgoing, and hard working.

Educate and train them well: A common denominator among companies with a quality culture is an excellent, ongoing training program. New hires are immediately immersed in the company’s culture, learn its values, and become valued team members.

Allow them to fix anything: Quality culture requires the empowerment of employees to do whatever is required to create a satisfactory customer service experience.

Recognize and reward them regularly: Rewards are a key element in developing a quality culture, both on an individual and team basis. Set up recognition programs for people and teams that are more symbolic than material. These programs should reward behaviours and actions that support the culture values of “we’re all in this together”, open communication or process improvement, etc.

Tell them everything, every day: This way none of the staff feel left out. There is transparency and they are aware of what is happening within their organization.

Ethics is an important management consideration that has to be integrated into the service delivery process within any service organization. Ethical misconduct can have a direct bearing on the quality of a respective service.

Hoffman and Bateman (2006: 109) indicate that consumer vulnerability to ethical misconduct within the service sector can be attributed to the following sources, namely; services are characterized by few search attributes; services are often specialized and/or technical; some services suffer significant time lapses between performance and evaluation; many services are sold without guarantees and warranties; services are often provided by boundary-spanning personnel; variability in service performance is somewhat accepted; reward systems are often outcomes-based as opposed to behaviour-based; and lastly, customers are an active participant in the production process. Tertiary institutions can also expose their students to ethical misconduct stemming from any one of the above sources.

According to Naidoo (2011: 527) honesty; conflict of interest; discrimination on the grounds of age, gender or race; bribery; whistle-blowing; the accuracy of books and records; privacy of employee records; misuse of company assets; corporate governance issues; issues in negotiation; employee discipline; mergers and acquisitions; drug and alcohol abuse; and intelligence gathering are ethical issues that university management encounters.

In the case of UKZN, the issue of kickbacks to staff by students who want to gain entrance to university or kickbacks to management by suppliers who want to be awarded tenders to do work for the university very real issues faced by management. Academic plagiarism is another sensitive ethical issue that many universities are dealing with. If ethical misconduct occurs, this would affect the image and reputation of the university. If the image and reputation of the university is in disrepute, this would affect the way students and other key role-players within the tertiary sector perceive service quality at that university. Naidoo (2011: 527) argues that the

reputation and image of a university is thus an important service quality variable that makes a university unique and worth working or studying at, and under no circumstances should its integrity be compromised.

Apart from its students and employees, it is important to note that a university is an organization that needs to identify and build strategically important stakeholder relationships. According to Naidoo (2011:527), these relationships should be built on honesty, trust and integrity. These three factors relate directly to the image and reputation of a university.

Brink and Berndt (2004: 136) argue that it is crucial for an organization to understand the values and expectations of each stakeholder group in order to determine their willingness either to help or hinder the organization in striving to achieve its vision. Positive matching of the needs and objectives of the stakeholders and the organization is therefore required for a lasting relationship. The value provided to a customer is not created by the organization alone but requires a contribution from other stakeholders as well.

Developing a customer relationship management system that can track complaints and provide an indication of the quality perceptions of customers is another important management consideration that can impact on the quality of the service. If the organization has a good customer relationship management strategy in place, the relevant department can collect data on customers that can help management identify problems in the delivery process; loyalty; repeat purchases; satisfaction; and complaints and compliments received.

According to Kasper et al (2006: 199-200) complaints are an important source of information. The number and nature of complaints provide an indication of the quality perceptions of customers. If the registration and analysis of complaints are performed properly, the service provider can determine which aspects of the service do not meet customer expectations and adjust them. It can also determine which aspects of quality management should be the focus in forthcoming months.

It is important to note, however, that not all dissatisfied customers will register a complaint. Dissatisfied customers sometimes discontinue the service. On the other hand, customers who are happy with their service do not necessarily send written compliments to the service provider. A good customer relationship management system should use appropriate technology to gather current information on its customers. A blog should be set up where customers can log in their complaints, queries and suggestions.

Return on Quality (ROQ) is another important managerial concern associated with service quality. The management of a service organization invest a lot of time and money in getting the service quality equation right. Kasper et al (2006: 201- 202) advise that the consistency of the service quality theme throughout the literature, indicates practitioner interest and the pursuit of quality service which will ultimately result in happy and loyal customers. These customers in return, will spend more and broadcast the reputation of an institution far and wide through word of mouth and this process will be repeated constantly. In the case of tertiary institutions, management invest large amounts in developing quality service experiences. This is done to make students and stakeholders happy and in so doing ensure the continued loyalty of students each year as well as continued donor sponsorships and contributions.

Kasper et al (2006: 202) add that ROQ studies conducted by Rust, Zohorik and Keiningham in 1995 identified four principles that provide an operational method linking quality and financial return. These are discussed below:

1. Quality is an investment

Organizations commit resources to staff training, process mapping, complaint handling and service specification in order to secure a return.

2. Quality efforts must be financially accountable

An organization needs to be clear about why it is spending money on service quality and the appropriateness of this expenditure. In operational terms the expenditure must be financially defensible.

3. It is possible to spend too much on quality

One can think of investment in staff and training as a good service environment and competent technology to secure a rise in perceived service quality. However, consideration should also be given to additional expenditure on fresh flowers at the reception, staff uniforms with gold buttons and the very latest computers. These can raise perceived quality.

4. Not all quality expenditures are equally valid

Different customer groups weigh different aspects of the service differently, and it is has been established that small, innovative investments such as free food samples, giveaway pens and even the gift of a comb used while cutting one's hair can enhance the perception of quality in different service settings.

Since people within the organization drive quality, a performance management system is a valuable management tool that can be used to improve quality performance and enhance productivity within an organization. Performance evaluation at university level should focus on themes such as individual development; management training; human resources planning; standards of performance; career progression; opinion surveys; fair treatment; and if possible, profit-sharing. UKZN has launched a performance management system to help the institution streamline quality issues relating to staff and the delivery of high quality services within the University.

## **2.7 Marketing issues associated with service quality**

According to Lovelock and Wirtz (2011: 404), marketing's interest in service quality is obvious; poor quality places a firm at a competitive disadvantage, driving away dissatisfied customers. The idea, therefore, is to develop marketing programs around the concept of quality within the service offering. Attempts to improve quality of service can be achieved within tertiary institutions if staff is motivated, educated and trained to deliver quality services. Quality improvements by means of customer care initiatives can also be introduced within tertiary institutions. For a tertiary institution to market itself, it first needs to tap into issues of service quality and how they impact on the students' levels of customer satisfaction.

Baron and Harris (1995: 167) reiterate this argument, stating that issues of service quality and customer satisfaction lie at the heart of service marketing and management and that both are seen as desirable outputs of any service strategy. Best (2005: 209) adds that if one were to look at dimensions of product quality, this should include customers' expectations with respect to conformance, reliability, performance and durability.

One market consideration is planning and creating service products. According to Lovelock and Wirtz (2011: 105), when designing a service concept, service marketers must take a holistic view and include the core product; supplementary services; delivery processes; and document the delivery sequence over time. In the case of UKZN, the core service is teaching by academics; support services include registration; library services; residence services; and providing security on campus. Academics and support staff deliver their respective services to students. Since students are unique and the university provides a "teaching service" to them, the module per semester approach for example, would appeal to them.

Another crucial marketing consideration with regards to quality is the issue of branding. According to Lovelock and Wirtz (2011: 117), providers of intangible services also offer a menu of products, representing an assembly of carefully prescribed value added supplementary services built around the core product. According to Bruhn and Georgi (2006: 275), brands are important assets of a firm and are the source of competitive advantage and firm value. Brands drive customer behaviour in many purchasing decisions, as the customer decides on the best brand. An organizational brand image whose core foundation is quality service delivery would be a winning formula in the service industry. A branding strategy uses the name and logo of the organization, colour, design and a phrase to distinguish itself from other service organizations.

According to Naidoo (2011: 528), the UKZN brand is synonymous with quality education, skilled academics and state-of-the-art resources, systems and technologies that form the core of delivering quality education to its students. Best (2005:210) indicates that the appearance of the product and its reputation can also serve as a source of product differentiation. UKZN's diverse range of degrees, diplomas, and certificate courses and its high research output, coupled with strong community outreach programmes have indeed set it apart from other tertiary institutions (UKZN, 2007: 24). Best (2005: 212) further argues that brand differentiation provides a way to position a business' products relative to competitors and to create incremental benefits and value.

Brand equity is another important consideration. According to Aaker (1991: 15), brand equity is defined as a set of brand assets and liabilities linked to a brand name and symbols that add to, or subtract from the value provided by a product or service. Bhattacharjee (2010: 301) notes that Aaker is one of the leading authorities on brand equity who observes that a service organization's brand equity has the following crucial variables: brand awareness; brand association; customer loyalty; perceived quality; and propriety assets.

If a university is to promote brand equity, the management and public relations office of that university has to develop marketing programs that can build a strong, positive and inspiring consumer association and experience. Kerin, Hartley, Berkowitz and Rudelius (2006: 301) identify four steps that can be taken to create brand equity within an organization. The first step is to develop positive brand awareness and association of the brand in the consumers' minds with a product class. In other words, there is a need to give the brand an identity. In step two, the marketer must establish a brand meaning in the minds of consumers. Meanings arise from what a brand stands for and can have two dimensions, viz. a functional performance-, related dimension; and an abstract, imagery-related dimension. The third step is to elicit the desired consumer responses to a brand identity and meaning. Here attention is placed on how

consumers think and feel about a brand. Thinking focuses on a brand's perceived quality, credibility and superiority relative to other brands. Feeling relates to the consumer's emotional reaction to the brand. The final and most difficult step is to create consumer brand resonance evident in an intense, active, loyal relationship between consumers and the brand. A deep psychological bond characterizes consumer brand resonance and the personal identification consumers have with the brand. In the 2010 UKZN Annual Report (UKZN, 2010: 70-71) the University's Corporate Relations Division indicated that the UKZN brand required reinforcement from both an internal and corporate perspective. This recommendation was made decision was taken after this division conducted a survey among UKZN's stakeholders to ascertain their perceptions and views of the University.

Another important consideration that goes hand in hand with branding and positive brand promotion is the advertising and public relations function. All these services are managed by the Corporate Relations Division at UKZN. When launching new technologies, research and hosting conferences and other prestigious events, UKZN uses television, radio, magazines, newspapers, and the internet to promote the University locally and abroad. The development and distribution of brochures to school learners at open day events are also used to help promote the University, its brand and positive image in KwaZulu-Natal (UKZN, 2010: 70-72). Kasper et al (2006: 410) emphasize that communication about services will impact on the perceived quality of the service among customers. Communication therefore affects the various dimensions of service quality as well as the overall service quality. An organization must therefore learn to communicate the service offering to customers in its marketing programs in the right manner.

Kasper et al (2006: 410) argue that a promotion strategy has a direct impact on service quality. They observe that in the SERVQUAL Model, customers' expectations are strongly affected by four factors: word of mouth communication; personal needs; past experiences; and external communications. When developing promotional programmes to promote the services of the organization, it is important that particular attention be paid to these four areas, as they have a direct impact on customer perceptions which in turn, directly affect the overall service quality aspect of the service.

UKZN uses its Corporate Relations Division extensively to communicate its service offering. Since public relations forms part of this division, this study also examines public relations. According to Payne (1993: 159), public relations is concerned with a number of marketing tasks that include building or maintaining image; supporting other communication activities; handling problems and issues; reinforcing positioning; influencing specific publics; and assisting with the launch of new services.



Payne (1993: 160) identifies a wide range of tools that can be used in the design of a public relations program. These include press releases; annual reports; brochures; posters; articles; employee reports; press conferences; seminars; speeches; and conferences. Another useful tool used by public relations is investor relations. This aims to gain the support of investors and analysts. Stories which increase media coverage, exhibitions and displays and sponsorship of charitable causes and community projects are further tools that can be used in a public relations program.

UKZN can use all the above tools in the design of its public relations program. Any or all of the tools can set the stage to project UKZN as a distinguished and prestigious university. Shanker (2010: 578) argues that promotion of education services relies more heavily on publicity than any other element.

It is important the marketers of tertiary education services identify the correct segment for their service offering. A university needs to accumulate significant data on student expectations of the university. Research surveys can be carried out to identify the consumer behaviour of the student market segments. Pricing and how it would affect the quality of the service offering can also be identified.

According to Bruhn and Georgi (2006: 193), price can play the role of a quality indicator. For the customer, price is a signal for the quality level of the service. A high price signals a high quality level, while a low price signals a low quality level. Due to their intangibility and heterogeneity, services are more difficult to evaluate than many tangible products, and therefore customers look for quality indicators such as price, to estimate the quality level of a service. In the case of UKZN, the manner in which a student perceives value for fees paid is often subjective. Lovelock and Wirtz (2011: 163) suggest that value is subjective and that not all customers have the expertise to assess the quality and value they receive. Therefore to manage the perception of value, effective communication and even personal explanations are needed to help customers understand the value they receive.

It is important to note that customers do compare prices; therefore the customer's needs should always be taken into account when pricing the service. Bennett et al (2003: 278) indicate that one of the difficulties with customer perceptions of what represents good value is that customers are all different. Therefore, setting a price for a service product that will be perceived by customers as good value for money requires considerable market research to determine the price range for a particular service that the target segment of customers considers to be good value.

According to Kurtz and Clow (1998: 275), distribution involves the availability and accessibility of a service to consumers. From a customer's viewpoint, availability means the service is available to the consumer when the need arises. Accessibility means that it is relatively easy for the consumer to conduct a transaction with the service vendor. The SERVQUAL Model identifies the availability of the service and accessibility as strong quality indicators that affect customer expectations. The use of internet technologies, which were discussed in more detail above, can also help improve the availability and accessibility of the service, especially in the case of tertiary education.

The above discussion has highlighted how quality impacts on marketing issues.

## **2.8 Strategic issues in managing service quality**

Adullah (2005: 32) comments that service quality has emerged as a pervasive strategic force and a key strategic issue on management's agenda. There are three broad strategic issues which managers need to acquaint themselves with in their quest to pursue service quality.

These are market segmentation, competitor intelligence and resources. These issues are briefly discussed below.

Each market segment can have quite different service quality expectations. It is thus important for management to understand each of the organization's specific market segments and to develop strategies to attract their attention or retain their loyalty to the service provided. According to Bruhn and Georgi (2006: 381-382), four types of market segment strategies can be utilized by an organization, viz:

1. Market penetration strategy – here the service firm concentrates on existing services and markets. The firm aims at exploiting the current customer segments with existing services.

Possible tactics include gaining customers from competitors; cross-selling services to existing customers who do not use all the services currently offered; customer recovery; and regaining lost customers through compensation offers.

2. Service development strategy – this focuses on existing market segments with new services. The newly developed services can be sold to existing customers via cross-selling campaigns, or can play a role as a switching barrier when a provider succeeds in positioning itself as an innovative leader in the market.

3. Market development strategy - here the service provider focuses on new markets with existing services. A typical strategy of market development is regional expansion or broad international expansion.

4. A diversification strategy is achieved by focusing on both new markets and new services.

Within the tertiary education sector, it is important for management to develop segmentation strategies that focus on each unique segment's service quality expectations. For example, when promoting services to local and international students, the degree requirements could be changed or modified to accommodate international students, especially if they are on exchange programs.

Competitor intelligence is the second strategic issue that affects service quality. Any organization that wants to promote service quality within its delivery processes needs to acquire relevant information about its competitors and how they are satisfying their customers. Looking at a competitor's market offering is crucial when obtaining competitor intelligence as this information can be used to improve service offerings and market promotion.

Kasper et al (2006: 204) comment that market research can identify those aspects of service quality where an organization is achieving more or less than its competitors. Such research can provide useful strategic input when deciding on long term investment or development plans. The key issue is not to fall into a responsive strategic posture where an organization copies or replicates competitor activity. In service quality terms, it is better to base quality improvements on close dialogue with customers.

Resources are the trade-off between human and technological resources and need to be considered when looking at service quality. It is understandable that organizations sometimes opt to use technology since it is a cheaper and more efficient option than employing people. Furthermore, people have their own bias that can filter into the service process and compromise quality during the actual service encounter. In such a case it is more beneficial to use technology to eliminate such biases. Kasper et al (2006: 204) argue that service quality is ultimately driven by people, specifically service personnel, and even the most carefully specified and managed services can fail where people are not fully involved in quality initiatives. Human resources management can provide incentives; good working conditions; good team management; and reliable technical support which can make a considerable difference to service quality and customer satisfaction in the short term. Having committed well-trained and motivated staff

reduces recruitment costs and training costs; improves corporate knowledge; and builds stable customer relationships in the long term. However, technological solutions to the service quality problem should not be overlooked.

Tertiary institutions can also look at introducing technology to enhance overall quality within the service offering. Adequate training in using these new technologies should be introduced to help staff become more efficient in operating these new processes.

Another crucial strategic issue that affects service quality is competitive advantage. In view of the current global financial crisis, foreign investment and donor funds are decreasing. Government has recognized that attracting foreign students to study at South African universities is a way of acquiring income from foreign sources. In order to do so, South African universities have to have a competitive edge. "Service quality" can be this competitive edge that attracts students to South African programs. Since students from Europe, Asia, America and Africa have a wide range of universities to choose from, UKZN needs to enhance and maintain a high level of service quality that can attract and retain international students to its wide range of program offerings, (Naidoo, 2011: 526 - 527).

## **2.9 How to monitor and improve service quality**

In order for an organization to monitor its service quality it is important to acquire feedback from customers on a regular basis. A good customer relationship management (CRM) system should be set up to track customer comments, queries, suggestions and complaints. Best (2005: 277) observes that a CRM system should be designed to facilitate a one-on-one customer relationship with target customers. One of the primary goals of CRM is to identify problems, resolve them, and maintain a dialogue with customers as to how the company can improve its service quality.

Christopher, Payne and Ballantyne (2002: 170) also suggest that monitoring service quality means undertaking regular customer service tracking studies and identifying both emerging and critical service issues. This should be followed by staff attitude surveys; "risk point" feedback systems; and routine reviews of internal service quality performance standards.

## **2.9.1 How to monitor service quality**

Two processes to monitor service quality will be discussed here; these can be used by the University.

### **2.9.1.1 Walk-Through Audits**

Fitzsimmons and Fitzsimmons (2008: 118) argue that because the customer is a participant in the service process, his or her impressions of service quality are influenced by many observations. An environmental audit can be a proactive management tool for the systematic evaluation of a customer's view of the service provided. A walk-through audit (WtA) is a customer-focused survey to uncover areas for improvement. The WtA can be a useful diagnostic instrument for management to evaluate the gaps in perceptions between customers and managers of the service delivery system. Customers visit a site less frequently than managers and are thus more sensitive to subtle changes (e.g. peeling paint or worn rugs) than managers who see the facility every day and are likely to overlook the gradual deterioration of the supporting facility. The quality of customer service can also deteriorate, but may be less noticeable to employees and managers than customers.

In South Africa, tertiary institutions are required to provide quality service and quality audits are under way. The researcher observed from UKZN's Institutional Audit Portfolio document (2008) that the University had embarked on a quality audit that provided stakeholders with deep insight into the functioning of the University.

### **2.9.1.2 Quality monitors**

Christopher et al (2002: 170-175) identify six service quality monitors that can be used by management. These are customer service tracking studies; a service environment or branch quality maintenance index; silent shopper; staff climate monitor; "risk point" analysis; and reviews of service standards.

Customer service tracking studies identify customers' wants; needs; expectations; and goals which should be ascertained through dialogue with them, either formally or informally. Companies often gain the most important insights from customers during dialogue at the qualitative research stage. No proprietary list of service quality attributes can be more relevant than a list of service attributes based on the specific requirements of a firm's own customers (Christopher et al, 2002: 170 - 173).

A service environment or branch quality maintenance index measures the specifics of an organization's service environment against a checklist of items, such as adequacy of outside parking; convenience of entry points; adequacy of lighting; functional layout; general cleanliness; and so on. Some service providers conceptualize their interior "service-scape" in terms of a number of "service activity zones", where the ambience or facilities differ from one service zone to another. The physical service environment needs to be routinely assessed to establish whether it can support the organization's service objectives and whether it is being maintained in good order (Christopher et al, 2002: 173 - 174).

Silent shopper is a survey monitor that attempts to replicate the shopping experiences of the typical customer. Skilled market researchers act as surrogate customers and sample and report on, their shopping experience. The purpose of this monitor is to diagnose what it feels like to be a customer and what services improvements the business might be overlooking (Christopher et al, 2002: 174).

The staff climate monitor measures employees' views of customer service and defects which can be revealing, especially when there is a gap between their perceptions and customer perceptions of quality. Companies can conduct an internal "climate" study as a counterpoint to external customer service research. A staff survey could also assess the impact of the firm's service philosophy on issues such as staff motivation, while at the same time discovering areas of general concern (Christopher et al, 2002: 174).

A "risk point" analysis is where the firm uses various forms of analysis to monitor "risk points" and "fail points" in the way customer service is delivered. These analyses might include account closure follow-up; customer complaint analysis; customer exit interviews; and so on (Christopher et al, 2002: 174).

Reviews of service standards are used by "production-orientated" companies who set up internal service standards without the benefit of market research and market intelligence. This short cut is best avoided because it presumes that managers know what customers want, which is unlikely unless they have asked for it (Christopher et al, 2002: 170 -175).

## **2.9.2 Improving service quality**

Benchmarking and service blueprinting are two valuable techniques to improve service quality within an organization. They are discussed below. Deming's 14-point program for quality improvement and its applicability to a university setting is also discussed.

### **2.9.2.1 Benchmarking**

Benchmarking can be a major catalyst in improving quality and productivity within a service organization. Benchmarking originated from the Japanese practice of "dantotsu" which means striving to be the "best of the best". A company's products, services and practices are continually compared with the standards of the best competitors and identified industry leaders in other sectors. By observing and measuring the best within and outside the industry, it is possible to improve the performance of the company. Benchmarking can be used to improve service quality or reduce costs. For example, it may demonstrate that subcontracting activities to third parties is more competitive (Buckley, 1993: 223 - 226).

Lovelock and Wirtz (2011: 410) indicate that a key objective of comparison against other units (branches, teams, service products, competitors) is to motivate managers and service staff to improve performance, especially when the results are linked to compensation.

Fitzsimmons and Fitzsimmons (2000: 50) concur that personnel qualifications for hiring, promotion and merit increases also related to meeting standards. For example, university professors are seldom granted tenure unless they have published because the ability to publish in a refereed journal is considered to be independent evidence of the quality of an academic's research. A measure of organizational effectiveness in controlling quality would be the presence of active self-evaluation procedures and knowledge of peers' performance.

In the case of UKZN, comparing itself with other tertiary institutions can help improve or better its present quality variables. UKZN can measure its ranking in terms of research output with other universities in South Africa.

### **2.9.2.2 Service blueprinting and process analysis**

"Blueprinting" and service process analyses are concepts which break down the basic systems and structures of an organization in order to develop a greater understanding of the service process. Blueprinting involves identification and management of encounter points; pressure

points; and moments of truth. Each moment of truth represents a point where the service provider demonstrates elements of both functional and technical quality in different proportions. Every individual moment of truth adds to, or detracts from, the overall image of the service provider. Every moment of truth reinforces the quality of service, or lack thereof. The blueprint is a valuable tool in helping visualize the service process; understanding what can go wrong; and setting performance standards for improvement in service quality. This helps not only with solving potential problems but also in designing ways to deal with service recovery. Many service companies are expressing interest in using blueprinting methods to improve their service quality (Buckley, 1993: 226 - 229). Lovelock and Wirtz (2011: 420) add that blueprints can be used to identify the potential points where failure is most likely to occur, and facilitate an understanding of how failures at one point may have a ripple effect later in the process. By adding frequency counts to the failure points in a blueprint, managers can identify the specific types of failures that occur most frequently and thus need urgent attention. Knowing what can go wrong and where, is an important first step in preventing service quality problems. If UKZN were to use blueprinting, staff would be able to visualize the service process and understand where and how they are going wrong and adopt performance indicators to prevent such quality failures in the delivery process recurring.

### **2.9.3 Deming's 14-point program**

Although Deming's theory has already been discussed, the following paragraphs will highlight Deming's 14-point program and its implications for improving service quality. As a founding father of quality research, Deming made some interesting contributions to improving service quality. Deming believed that management was responsible for 85% of all quality problems. To improve quality within an organization, Deming developed a 14-point program. Some of these contributions can be applied in a university set-up.

Fitzsimmons and Fitzsimmons (2008: 154) outline Deming's 14-point program. Point one is to create constancy of purpose for improvement of product and service. Management must not be preoccupied solely with the next quarter; instead it should also build for the future. Innovation should be entrenched in all areas of the business. At UKZN, the use of innovative technologies and processes can help improve service quality.

The second point refers to the adoption of a new philosophy towards service quality. Management must refuse to allow commonly accepted poor levels of service that contribute to work delays and lax service. The re-organization of the UKZN structure has resulted in a leaner



and more efficient support structure, where poor levels of service quality that contribute to work delays and lax service are not condoned.

The third point in Deming's program refers to ceasing dependence on mass inspection. Inspection comes too late and is costly. Instead, there should be a focus on the process itself. This is related to manufacture or production organizations and cannot be applied to a university scenario.

The fourth point is to end the practice of awarding business on price tag alone. The purchasing department should buy goods on the basis of statistical evidence of quality. The number of vendors should be reduced and high-quality suppliers should be rewarded with long-term contracts. The University can also apply these principles by rewarding high quality suppliers who provide value for money, high quality products and services.

The fifth point is for the organization to constantly improve its production and service system. The organization should task its staff to continually search for problems in the system, and seek ways of improvement. Waste must be reduced and quality improved in every business activity, both front office and back office.

At the University specific staff should be in place to monitor quality, identify problems in the system and offer feedback on improvements.

The sixth point Deming recommends is to institute modern methods of training on the job. Organizations must restructure training in order to define acceptable levels of work. Statistical methods should be used to evaluate training. The University should also employ modern methods of training on the job where applicable as this can lead to staff providing better services in the long run.

The seventh point is to institute modern methods of supervision. Supervision should focus on helping workers to do a better job. Supervisors should also provide the tools and techniques to promote pride in one's work. These principles can be adapted to the University situation. If UKZN staff wants to improve the manner in which they are doing their jobs, the services they provide to students or other staff will also be of better quality.

The eighth point is to eliminate fear by encouraging the communication of problems and expression of ideas. UKZN University staff should be encouraged to communicate their problems and express their ideas to management and should not fear repercussions if they do so.

The ninth point is to break down barriers between departments. Management should encourage problem solving through teamwork and the use of quality-control circles. In order for service excellence to permeate throughout the University, there should be no barriers between departments; teamwork is required in order to provide high levels of overall service quality within the various University structures.

The tenth point dictates that numerical goals for the workforce be eliminated. Goals, slogans and posters cajoling workers to increase productivity should be abandoned. Such exhortations cause worker resentment, because most of the necessary changes are outside workers' control. This point does not apply to a university.

The eleventh point is to eliminate work standards and numerical quotas. Production quotas focus on quantity and guarantee poor quality. Quality goals such as an acceptable percentage of defective items do not motivate workers to improve their performance. Statistical methods should rather be used for the continuing improvement of quality and productivity. This principle cannot be adapted to a university.

The twelfth point Deming indicates is the removal of barriers that hinder hourly workers. Workers need feedback on the quality of their work. All barriers to pride in one's work must be removed. This point refers to production or manufacturing organizations.

The thirteenth point is to institute a vigorous program of education and training. Due to changes in technology and the turnover of personnel, all employees need continual training and retraining. At the University, training is imperative at all levels, as this strengthens the institution's commitment to providing better services to its students.

The last point raised by Deming is to create a structure in top management that promote the above 13 points every day. Management's permanent commitment to continuous improvement in both quality and productivity should be clearly defined. At the University, management must be clearly committed to driving high levels of service quality.

## **2.10 Reviewing quality within tertiary institutions**

Tertiary institutions need to re-look at themselves and account for the quality of education that they provide. They can do this by taking the needs of students into account and having proper systems and personnel in place to implement and deliver quality service. The researcher concurs with Souter (1996: 72), who states that there are a number of problems in developing

performance indicators within tertiary education. A particular problem is that such performance indicators tend to become measures of activity rather than true measures of the quality of educational services.

Naidoo (2011: 526) developed the following constructs that constitute quality within a tertiary institution:

- Quality in terms of well skilled academic staff;
- Quality of programme offerings and their value and relevance to the labour market;
- Quality in terms of good facilities, equipment and lecture and recreational venues;
- Quality in terms of good administration staff who are efficient in administration and student affairs;
- Quality in terms of safety of students on campus;
- Quality in terms of research output;
- Quality in terms of scholarships and funding facilities available to students;
- Ranking of the University within the country; and
- Global recognition of the University and the University's commitment to international student enrolments.

Yeo (2008: 153) highlighted a number of ways in which tertiary institutions fall short of improving service standards. Not knowing what customers expect impacts on the quality of the services offered. Universities are not prepared for the shifting needs of their customers (students). Courses and programmes are not always relevant in terms of subject matter and teaching approaches. Learning processes can be compromised and academic rigor is questioned.

Yeo (2008: 153-154) also regarded inadequate service quality standards put in place by university management as a factor contributing to poor service quality. Institutions fail to grapple with the shortage of teaching staff when they constantly have to increase enrolments in order to remain competitive. Class sizes are large, thereby increasing the lecturer: student ratio. Students receive less individual attention inside and outside the class. Service performance inconsistencies are another factor that can cause a decrease in service quality at universities. Institutions do not always identify appropriate specifications that would meet customer expectations in terms of content, delivery, and application. Learning experience and orientation at large cannot be evaluated by grades alone. Service performance should go beyond tangible forms (Yeo, 2008: 153).

Another way in which a university's service quality is compromised is when promises do not match delivery. Institutions tend to oversell their services, leading to exaggerated promises that misrepresent their actual potential and academic readiness. One of the most common

problematic strategies is the excessive promotion of facilities and support services ranging from “hardware” (technology) to “software” (people), yet failing to meet all these promises completely (Yeo, 2008: 153).

Finally, Yeo (2008: 153) indicates that if tolerance levels are ignored, service quality would be jeopardized within a university. In such a situation, the institution fails to diversify the expectation levels of customers in such a way that the shortcomings of one service are offset by the strengths of another, such that the more important the service area, the smaller the boundary of tolerance. A lack of choices in terms of learning diversification frequently deters customers from modifying their expectation of service standards.

Bennett et al (2003: 141) indicated that the following factors contribute to pre-purchase and post-purchase value when choosing a university course. Pre-purchase value variables that a student is likely to consider would include the reputation of the university; the quality of its staff; cost; location and distance from home; availability of the desired degree (e.g. Masters of Electronic Commerce); length of course; where friends are going to study; social clubs; and social life. Post-purchase value variables that a student would consider before making the decision to study at an institution include knowledge gained; the quality of staff; cost; other students (motivation, friendships, quality of students); library, internet and computer access; length of course; industry links; social clubs; and social life. Shanker (2002: 571) notes that a survey conducted among management students at Indian universities revealed that students chose institutions on the basis of the reputation of the university; the number of applicants for the course; past success rates for placement; faculty expertise; the breadth of specialisation offered; infrastructural facilities; and fees.

Another important consideration regarding the quality of tertiary institutions is the importance of support staff services to students. Zemke and Schaff ( 2003: 7 - 8) argue that support services facilitate learning by distributing tasks and experiences in several possible ways: administration services through helping students manage their non-academic responsibilities; social services through helping them increase their network via student clubs and events; and psychological services through the provision of counselling and coaching. Support services are an extension of student experiences and serve as a platform for personal growth and development. Yeo (2009: 62 - 76) observes that a similar study to the one he carried out at the Engineering Faculty at Singapore University was undertaken by Clark and Rasay (1990). They reported that high achieving university students made extensive use of support services.

The literature review also revealed another interesting dimension in the way academics view quality. According to Scot et al (2004: 9 -10), there has been a shift in perceptions of students and lecturers. Universities are increasingly considering students as “clients” or “customers” of an educational product. This shift brings to the fore dilemmas relating to the educational component of this relationship. Academics are still struggling to conceptualize and make sense of the implications of this change in student-staff relationships that suggests they should become “partners in learning”. Academic staff often resent the changes in their working lives, and changes in the priorities relating to teaching and research that they had become accustomed to. Taking the above debate into account, the researcher includes academic staff perceptions on quality and delivery of services to students.

The literature also raises the important consideration of the tangibles peculiar to educational services. These could relate to the material things used to assist in the service delivery process. According to Yeo (2009: 65), the wider spaces of learning and social interaction including facilities such as laboratories; libraries; computers; sports; healthcare centres; and cafeterias contribute to the service quality of any institution. Tangibles such as physical facilities, equipment and the professional appearance of staff are critical to providing a total educational experience. According to the UKZN 2010 Annual Report (UKZN Annual Report, 2010 and UKZN Audit Portfolio Report, 2008) tangibles can be grouped into:

Facilities - space for students, namely, adequate lecture venues; good acoustics; lighting and venues that have well equipped visual aids like laptops; data projectors; and overhead projectors.

Safety and Security - adequate security should be provided at all campuses to ensure student and staff safety at all times against crime such as theft; rape; car-jacking; theft from cars; and robberies.

Location of campus - the campuses should have adequate transport in place for students who need to travel between campuses or use buses to travel to and from the University. Another issue in terms of location is students having easy access via foot to libraries, student union offices and lecture venues and sports facilities.

Healthcare - the University has an obligation to provide health care services such as free student counselling and medical services to students and staff on each campus.

Cafeterias - since students spend most of their time at campus, the food prepared and provided by the cafeterias should be of good quality and affordable.

The wider spaces of learning and social interaction, including facilities such as laboratories, libraries, computers, sports and healthcare centres as well as cafeterias therefore contribute to the total service quality of an institution.

Yeo (2009: 66) argued that it is essential to promote the right mind set amongst staff, i.e. being student-centred rather than merely task-driven. This suggests the need for a customer-oriented approach, rather than rules and regulations. In the case of UKZN, investigating the quality perceptions of academic and support staff would add to a wider understanding of the quality dimensions and relationships that occur within the service delivery process. Possible challenges facing staff in conforming with the paradigm shift relating to “quality” within tertiary institutions will also come to the fore.

In the case of UKZN, identifying the gaps in the service delivery process will provide valuable insight into improving overall service quality within a tertiary institution environment. Hoffman and Bateman (2006: 356) argue that firms that excel in service quality do so by avoiding potential quality gaps in their delivery systems. Numerous managerial, marketing and operational factors influence the size of each of these gaps.

According to Naidoo (2011: 528), marketing programs should be developed around the concept of quality within the service offering. Student satisfaction with tertiary institutions can be improved if staff is motivated, educated and trained to deliver quality services. Yeo (2009: 66) argues that the strategic deployment and training of staff would be required to ensure that service standards are maintained at an optimal level. Quality improvements in the form of customer care initiatives can also be introduced at tertiary institutions. For a tertiary institution to market itself it first needs to tap into issues of service quality and how these impact on students’ levels of customer satisfaction. Baron and Harris (1995: 167) reiterate this argument, stating that issues of service quality and customer satisfaction lie at the heart of service marketing and management and that both are seen as desirable outputs of any service strategy.

As has been noted, there is a paucity of research on service quality within tertiary institutions in South Africa as compared with European countries. No broad study has been undertaken in South Africa that canvassed students, academics and support staff’s perceptions and expectations of quality within tertiary institutions. Sotar and McNeil (1996) measured service quality in a tertiary institution in Australia. Mathew and Joseph (1997) conducted research on

service quality at their university in New Zealand. However, both these studies were restricted to student perceptions. Studies conducted by Yeo (2009: 62 - 76) at Singapore University revealed that the quality of educational services is not limited to the experience of the classroom. Since research on service quality within tertiary institutions only gained momentum in the late 1990s, knowledge about quality within tertiary institutions is very recent.

The importance of service quality to an organization cannot be underestimated as it lies at the very core of an organization's marketing and management strategy. Student satisfaction regarding their learning experience is crucial to an institution's popularity and competitive edge over other institutions. Students become the mouthpiece of institutions as they appear in promotional materials to increase experiential visibility and institutional solidarity. In this instance, they serve as customers endorsing the product and the service quality offered by the institutions they represent.

## **2.11 Summary**

This chapter presented a comprehensive literature review on the concept of service quality. It discussed various definitions of quality; identified how organizations view various quality issues; and examined the various models service organizations can adopt to achieve quality. The literature review also revealed how quality affects managerial, marketing and strategic issues within an organization. Furthermore, it highlighted ways in which service organizations could monitor and improve service quality and. Service quality within tertiary institutions was reviewed. This study adopted the SERVQUAL Model and Gaps model theoretical framework.

The next chapter will examine the background of UKZN and review its approaches to managing quality.

## CHAPTER THREE

### BACKGROUND AND REVIEW OF UKZN AND ITS APPROACHES TO MANAGING QUALITY

#### 3.1 Introduction

This study was conducted within the African context at a South African university. The history of tertiary institutions in South Africa is different from that of the other countries. This is due to South Africa's unique history, in particular, the apartheid regime. This history had a profound effect on the South African universities they have had to be transformed in the post-apartheid era reflect the country's new democracy and ensure equitable access to tertiary education. Thus the factors that contributed to the transformation of tertiary institutions in South Africa are different from their Western and Asian counterparts.

South African universities have undergone significant transformation, with some of the country's 36 former universities and technikons being merged, resulting in a final count of 23 public higher education institutions, namely, Cape Peninsula University of Technology; Central University of Technology; Durban University of Technology; Mangosuthu University of Technology; Nelson Mandela Metropolitan University; North West University; Rhodes University; Stellenbosch University; Tshwane University of Technology; University of Cape Town; University of Fort Hare; University of Johannesburg; University of KwaZulu-Natal; University of Limpopo; University of Pretoria; University of South Africa; Free State University; University of the Western Cape; University of the Witwatersrand, University of Venda; University of Zululand; Vaal University of Technology; and Walter Sisulu University, (South Africa Info, 2013:2).

According to Naidoo (2011: 526), the tertiary education sector in South Africa is extremely competitive. All 23 universities, as well as private colleges compete for the same pool of students. Naidoo (2011: 528) adds that attracting and retaining students is an important strategic marketing drive. To attract and retain students, universities need to be market-driven and identify a competitive edge such as high quality service offerings.

Shanker (2010: 566) argues that an education service can be evaluated on the basis of its service content (curricula; course material; student workload; and constituent faculty) as well as the service delivery system. Education consumers have a wide array of choices and may make



selections based on their own evaluation through referrals; opinions sought from others; and the brand or corporate image of the educational institution. South African universities have become more market orientated and are tailoring their degrees and diplomas to suit the needs of students and the labour market. To meet students' needs, university management tries to provide modest, low cost accommodation close to the university. They also provide large, well equipped lecture venues; laboratories; entertainment; and sports facilities and endeavour to ensure a safe and welcoming learning environment.

This chapter provides a brief background on UKZN and highlight the approaches that the University has adopted to maintain quality within the institution.

### **3.2 Background of the University of KwaZulu-Natal (UKZN)**

UKZN is a fairly young institution that was born out of the merger in January 2004 of the University of Durban-Westville (UDW) and the University of Natal (UND). A brief history of UND and UDW is important in order to understand the foundation of UKZN (UKZN, 2009).

The Natal University College in Pietermaritzburg was founded in 1910. Due to growing student numbers, its wide range of courses and its achievements and opportunities for research, the University of Natal was granted independent university status in 1949. By that time, it was already a multi-campus institution, having been extended to Durban after World War 1. The distinctive Howard College building was opened in 1931, following a donation by Mr T.B. Davis whose son Howard Davis was killed during the Battle of Somme in World War 1. In 1946, the government approved a Faculty of Agriculture in Pietermaritzburg and, in 1947, a Medical School for African, Indian and Coloured students in Durban. The university was its staff and student activism against government imposed racial segregation (UKZN, 2013:1).

The University of Durban-Westville was established in the 1960s as the University College for Indians on Salisbury Island in Durban Bay. Student numbers throughout the 1960s was low as a result of the Congress Alliance's policy of shunning apartheid structures. This policy gave way in the 1980s to a strategy of "education under protest" which sought to transform apartheid institutions into sites of struggle. Student numbers grew rapidly and in 1971, the College was granted university status. The following year, the newly named University of Durban-Westville moved to its modern campus in Westville and was a site of major anti-apartheid struggles. UDW became an autonomous institution in 1984, opening its doors to students of all races (UKZN, 2013: 1).

### 3.2.1 The Merged University

In order to transform the tertiary education system, the newly elected democratic government proposed that certain universities merge. In giving notice in terms of the Higher Education Act 1997 of his proposal to merge the University of Durban-Westville and the University of Natal, the then Minister of Education, Professor Kader Asmal, stated the reasons for the merger as follows:

- to overcome the apartheid divide between a historically white and historically black institution;
- to promote staff equality;
- to ensure the effective and efficient use of resources through reducing overlap and duplication in academic programmes;
- to consolidate existing programmes to enable a wider range of academic programmes to be offered in response to regional and national needs; and
- to mitigate the effect of unnecessary competition,

(Institutional Audit Portfolio University of KwaZulu-Natal, 2008:20).

The merger resulted in five UKZN campuses: Edgewood, Howard College, the Nelson R. Mandela School of Medicine, Westville and Pietermaritzburg. The five campuses were home to different faculties: the Edgewood campus was home to the Faculty of Education; the Howard College campus was home to four faculties, namely, the Faculty of Engineering; the Faculty of Humanities; the Faculty of Development and Social Sciences; the Faculty of Law; and the School of Nursing, which is part of the Faculty of Health Sciences. The Nelson R. Mandela School of Medicine is located on the medical school campus. The Westville campus was home to the Faculty of Management Studies; the Faculty of Health Sciences; and the Faculty of Science and Agriculture, while the Pietermaritzburg campus was home to the faculties of Agriculture, Engineering and Science; Education; Humanities; and Law and Management (UKZN, 2009). As noted in section 3.2.2 below, this system was re-configured in 2012.

The College Model was adopted to support the merger. UKZN is made up of four colleges (consisting of clustered faculties) each headed by a Deputy Vice-Chancellor and Head of College. Each College has as its own governance structure, an Academic Affairs Board responsible for the academic and research functions of the faculties within the College. Each College houses two faculties, each with a Faculty Board headed by a Dean. Faculties are made up of Schools, either with a single discipline or a set of cognate disciplines. Schools (each with a School Board and headed by a Head of School) are the primary administrative units, and the

smallest units to which financial responsibility and accountability are devolved (Institutional Audit Portfolio University of KwaZulu-Natal, 2008:21-22).

The corporate headquarters of the University, as well as its centralized support functions are housed on the Westville campus. The academic structure is supported by a full suite of administrative and service operations ranging from libraries and information and communication technologies to student services that fall under the control of Executive Directors within the Executive Management team. Heads of operational units are accountable to the member of the Executive under whose portfolio they fall (Institutional Audit Portfolio University of KwaZulu-Natal, 2008:25, 27).

UKZN is one of the leading universities in the province of KwaZulu-Natal. Four of its campuses are located in the City of Durban. According to UKZN Strategic Plan, (2007: 4), the University has just under 40 000 students spread across the five campuses. The key aim of the University is to provide quality university education in the metropolitan areas of KwaZulu-Natal (Institutional Audit Portfolio University of KwaZulu-Natal, 2008:43). However, it attracts students from all of South Africa's provinces, as well as students from abroad, particularly countries in Africa, Asia and Europe.

The University and its five campuses serve the needs of students in many different fields of study. The diagram below depicts the structure of the UKZN with its five campuses, colleges and the fields of study offered within their respective faculties.

**Table 3: The five campuses of UKZN, its colleges and the fields of study offered within their faculties**

	<b>Edgewood</b>	<b>Howard</b>	<b>Pietermaritzburg</b>	<b>Umbilo</b>	<b>Westville</b>
College of Agriculture Engineering & Science		Engineering (four schools)	Agriculture Engineering(School of Bioresources Engineering & Environmental Hydrology)  Science		Science Residual postgraduate Engineering
College of Health Sciences	Nursing		Education Humanities, Development & Social Sciences	Medical School	Health Sciences
College of Humanities	Education	Humanities, Development and Social Sciences	Education Humanities, Development & Social Science		
College of Law & Management Studies	Law		Law Management Studies		Management Studies

Institutional Audit Portfolio, University of KwaZulu-Natal (2008:26)

UKZN aspires towards the following high values and pledges to:

- Actively encourage and respect the right of all scholars, staff and students to engage in critical inquiry, independent research, intellectual discourse and public debate in a spirit of responsibility and accountability, in accordance with the principles of academic freedom and institutional autonomy.
- Promote access to learning that will expand educational and employment opportunities for all.
- Embrace its responsibility as a public institution that supports and contributes to national and regional development, and the welfare and upliftment of the wider community, through the generation and dissemination of knowledge and production of socially-responsible graduates.
- Ensure conduct according to the highest ethical standards, and provide education that promotes an awareness of sound ethical practice in a diverse society.
- Manage and run the institution in conscious awareness of the environment, and foster a culture of responsibility, and the ethical and sustainable use of natural resources.

- Ensure effective governance through broad and inclusive participation, democratic ethos of our country.
- Acknowledge the value of the individual by promoting the intellectual, social and personal well-being of staff and students through tolerance and respect for multilingualism, diverse cultures, religions and social values, and by fostering the realisation of each person's full potential, (UKZN Strategic Plan 2007-2016, 2007: 11)

However, the merger however presented many challenges, particularly in a higher education system that at the time was characterised by systematic problems such as leadership and governance failures, poor productivity, financial instability and student disenchantment.

(Institutional Audit Portfolio University of KwaZulu-Natal, 2008:43). The discussion that follows below indicates that despite the challenges posed by the merger, UKZN has grown and sustained itself accordingly.

According to UKZN's 2007 Merger Report, the merger was instrumental in achieving the creation of a new university, with a unique and shared African-centred vision, mission and goals. It created a new functioning governance and administrative system through the College, Faculty and School system. The University Strategic Plan was developed through a legitimate, transparent process incorporating consultation with all stakeholders. Faculties and Schools were successfully relocated while normal university operations continued. New, high quality infrastructure such as laboratories and student residences was created. The merger influenced the consolidation and implementation of research policies and support procedures, resulting in substantial increases in the research output and a high national and international research profile. The merger also led to the integration of curricula with improved standards. After the merger there was increased focus on teaching and learning, as evidenced through access, retention and success initiatives. Another valued contribution made by the merger was substantial progress in the UKZN's equity drive, both in terms of student demographics as well as laying a meaningful foundation for rectifying imbalances in the staff equity profile. Lastly, the new merged institution took an uncompromising stance against "intellectual corruption" (UKZN Merger Report, 2007)

### **3.2.2 College Re-Organisation**

At the time of the merger, it was agreed that the College Model would be reviewed after five years. The College re-Organization was completed by October 2011 and the new College structure came into effect on 1 January 2012.

The College re-Organization included the disestablishment of the faculties in order to create a College structure consisting of consolidated, single University-wide Schools and four Colleges. The reasoning behind the college re-organization was that by removing one layer of bureaucracy the University would be a leaner and more efficient structure. This new efficient University structure would be able to provide better quality services to its students. The main benefits of the new structure would be effective devolution across the University within the Academic and Support sectors. It would also create a professional support sector of the highest caliber to support the College and lend itself to the focus on academic and scholarly activities. The new structure would have no downward transfer of support, managerial or administrative duties and responsibilities within the academic sector. These activities were to be located in the envisaged new support leadership ([www.ukzn.ac.za](http://www.ukzn.ac.za)).

The Vice- Chancellor and Principal of UKZN, Professor M.W. Makgoba (13 June 2011), stated that the objectives of the college re-Organization were to achieve both structural and functional efficiency through appropriate and effective devolution, consolidation of Schools and the disestablishment of the Faculty level; streamline decision-making through a flatter and a competency-performance-based structure; create academic critical mass through consolidation of Schools and ensure the evolution of new forms and new ways of knowledge production, thus ensuring that academics focus on research, academic and scholarly activities rather than administrative matters. The Vice-Chancellor also indicated that the new structure would deepen the transformation of the University by bringing UKZN in line with best international practice and modern trends and efficient and competitive higher education institutions in order to realize its vision, mission and goals ([www.ukzn.ac.za](http://www.ukzn.ac.za)).

The issue of service quality is dealt with in UKZN's Strategic Plan. Here the University commits itself and its staff to providing quality services to its students in both the Academic and Support areas. According to UKZN's Strategic Plan 2007-2016 (2007: 24), the University has made the following commitments to overall quality:

1. In order to promote itself as an institution that cares for its clients, whether its own staff and students, or the public at large, the University has committed itself to the highest levels of service excellence and the continuous improvement of its processes and practices.
2. As part of an overall performance management system, the University has put in place service level agreements, standards of performance, and codes of conduct for Support divisions in specified situations.

3. Performance will be regularly monitored and evaluated, with a view to improving quality services offered, and inculcating an ethic of customer service to all stakeholders, internal and external to UKZN.
4. The successful attainment of service excellence is critically dependent on the establishment of sound working relationships within and between Support divisions, the Academic community, the Student body and External stakeholders served by these divisions. A clearly articulated web-based information site that provides full details of the relevant Support structures, key personnel, services provided, and that facilitates the initiation, approval and processing of transactions routinely and efficiently, will form part of the strategy to achieve service excellence.

It is clear that UKZN has a strong vision and clear strategic goals that depict it as a truly South African University that entrenches academic excellence, is at the forefront of innovative research, is steadfast in its critical engagement with South African society, and is engaged in positive transformation in actively redressing the disadvantages, inequities and imbalances of the past. The University employs world renowned researchers and academics that are engaged in research and teaching that contributes to change and the social upliftment of communities in KwaZulu-Natal, the country and the world at large. The University's commitment to this agenda adds to the quality of services it provides to its students.

The following section outlines the services provided by a university.

### **3.3 Services provided by a university**

Mavondo and Zaman (2000: 787) regard tertiary education as a professional service. Shanker (2002: 565) argues that education as a service can be about fulfilling the need for learning; acquiring knowledge; and providing an intangible benefit (an increase in knowledge, aptitude, professional expertise and skills). This is produced by means of a set of tangible (infrastructure) and intangible (faculty expertise and learning) facilities, which the buyer of the service does not own. One may have a tangible physical evidence of the service exchange transaction, but the actual benefit accrued is purely intangible in nature.

After analysing the Institutional Audit Portfolio University of KwaZulu-Natal report, as well as the literature on other universities cited by Mavondo and Zaman (2000: 787), it is concluded that the service package for tertiary education services includes the core service, i.e. the teaching and learning services provided by academic staff and administrative or facilitating

services that support the core service. Mavondo and Zaman (2000: 787) state that tertiary education does not only provide academic services, but services such as career counselling; hands-on experience; support services; provision of accommodation; and sporting and meal facilities. All these activities are aimed at supporting the learning experience and enhancing student satisfaction.

According to UKZN's Institutional Audit Portfolio (2008) report, both academic and support services are offered to students.

### **3.3.1 Core services or academic services**

In the academic sector, teaching and learning is the core service offered to students. Teaching is offered through formal lectures seminars and workshops conducted by the lecturer. The curriculum that the School and lecturer decide to offer in each module is part of the teaching and learning experience. Assessments by the academic staff can take the form of assignments; tests; seminars; tutorials; and practical that form part of students' duty performed requirement. A further assessment includes examinations. All student assessments must be fair and consistent within the School. An external examiner is often used to ensure fairness and consistency in the marking of examination papers. External examiners are independent and offer an unbiased review of examination papers. Academic staff also supervise research dissertations; these are also sent to external examiners for review. Research dissertation supervision entails providing guidance and mentoring towards the completion of a research project. The student is guided through the compilation of a literature review; drafting a questionnaire; data analysis; and the ethical clearance process (Institutional Audit Portfolio University of KwaZulu-Natal, 2008: 74-131).

Although there is no clear policy on quality issues, the basic premise of teaching excellence is a sense of professional courtesy; transparency in teaching; assessments; and fostering a caring attitude towards students. The duties and responsibilities of academic staff to their students are to develop modules and evaluate the curriculum in order to ensure quality with regard to content; the lecturing approach; supervision; marking assessments; and conducting student consultations. Teaching and learning experience occur at lectures, tutorials, practicals or during student consultation times. To provide high quality services, academic staff has to maintain professional courtesy towards their students; treat them in a fair manner; listen to their queries; and instruct them where necessary in order to improve their learning experience. Academic staff has a responsibility to the university to ensure excellence in their teaching (Institutional Audit Portfolio University of KwaZulu-Natal, 2008: 74-131).



### **3.3.2 Support Services**

Support services can be broken down into administrative or facilitating services and pure support services (Institutional Audit Portfolio University of KwaZulu-Natal, 2008: 188 - 256). These services are discussed in detail below.

#### **3.3.2.1 Administrative or facilitating services**

Administrative or facilitating services are services that facilitate the learning and teaching process. They include academic administrative support services; Information Communication and Technological services; library services; etc. (Institutional Audit Portfolio University of KwaZulu-Natal, 2008: 188). Mavondo and Zaman (2000: 788) indicate that in most tertiary institutions, students come into contact with administrative staff for many reasons. These include time-tabling; changing subjects and courses; paying fees; etc. Because of these extensive interactions, administrative staff plays a central role in generating student satisfaction.

The various support services will be discussed in detail below.

##### **a) Academic Administration Support services**

To support teaching and learning, the academic staff have support staff that work directly with them in dealing with the administration of the module. They also handle any queries or questions that arise from students pertaining to the module. Each module has a module administrator who liaises with students and communicates with them via the Student Management System (SMS) to inform them of the module outlines; notes; assignment and test dates; venue allocations for tests; duty performed marks and exam marks; test query dates; and exam script reviews. The administrator also assists the lecturer with printing tests; providing stationary; and general administration issues pertaining to the module.

Faculty offices and their personnel also provide academic administrative support services to students. They help with registration; de-registration of modules; graduation matters; and handle duty performed and exam marks after they are put into the system by the module administrator. They also attend to duty performed queries; as well as various queries on post-graduate issues. First year student orientation is also carried out by the Faculty Office staff together with academic staff each year to help students and their parents choose from the various programmes and degrees offered at the UKZN's five campuses (Institutional Audit Portfolio University of KwaZulu-Natal, 2008: 210-214).

#### b) Examinations

This department manages exam issues. They finalize dates; venues and times; receive and print exam papers; manage invigilation; and handle exam queries sent to them directly by students, the faculty or school. The department also assists with graduation together with Risk Management Services, the Faculty Office; and the School (Institutional Audit Portfolio University of KwaZulu-Natal, 2008: 216).

#### c) Student Registration

Application for first year students is done through the Central Applications Office (CAO). Students can also attend the student orientation day and meet with academic and administration staff who would give them guidance on degrees or programmes available. Brochures and pamphlets and application forms to the CAO are made available during student orientation. Once the CAO captures applications to UKZN they are sent to the respective faculties where the selection process takes place. The Dean; Admission Officers; and Heads of School or Academic Program Co-ordinators are involved in this selection process. Students who have scored the requisite number of points for a particular course are offered a place in the programme. The majority of selections are made in January, once the final matric marks have been published. After acceptance letters are sent to first year students, they are invited to an orientation day where tour the campus and shown the libraries and other facilities. Trips are organized to familiarize students that are not familiar with the cities of Durban or Pietermaritzburg. Students are also invited to talks on various issues and an orientation social is organized to welcome them to the University. Registration for first years is a campus-based process, or students can register on-line from home. On completion of registration, students are issued with student cards via Risk Management Services (RMS) (Institutional Audit Portfolio University of KwaZulu-Natal, 2008: 214).

#### d) Student Records

Students' records are the responsibility of the Student Records Office. The Integrated Tertiary System is a software programme that keeps systematized student records. These are designed with safety and security in mind. Students can access their records via the Student Records Office (Institutional Audit Portfolio University of KwaZulu-Natal, 2008: 2008:218).

#### e) Library Services

The Library provides students with access to books; journal articles; magazines; internet services; and newspapers. Library staff orients first year students on how to use the library. The library is pivotal to all students and library staff should be trained to always be friendly and helpful towards students who require their assistance. The library should also have state-of-the-art facilities and materials that students can use to enhance their learning experience. Students spend a lot of time in the library and their perceptions should always be taken into account by library staff unit. UKZN conducts student surveys on library services which help management and staff within this service sector to understand any shortcomings and improve their service delivery to students (Institutional Audit Portfolio University of KwaZulu-Natal, 2008: 189-190).

#### f) Information, Communication and Technology (ICT) Department

The ICT Department connects to all the services provided by the University. It provides an array of services that support the academic and administrative work of the University. The department must have properly trained staff to ensure the smooth running of these systems so that the University can run efficiently. UKZN uses a fully integrated packaged system, Integrated Tertiary Software (ITS) that manages student records, finance and human resources. For the administration of research, the University uses IRMA. ICT also supports Linux that provides research in quantum mechanics, chemical calculations, biology and environmental processes. The Department supports teaching and learning by providing and maintaining computer laboratories and student Local Area Networks (LANs). Other services offered to students by the ICT Department include: Moodle (here notes and assignments are placed on line for students, as well as a Short Messaging System to keep students updated on exam dates, exam marks, etc); GroupWise/Windows Outlook which connects students to e-mail; the Inner Web where for example, students can access parking disks; the Online Learning System that provides e-learning support; the administration of electronic multiple choice questionnaires for various disciplines; and facilitating on-line exams conducted in LANs for medical and computer science students.

The ICT Department provides students with disabilities with specialized equipment namely, Arkenstone Scanners; Zoom Text Magnifiers; Braille printers; and Jaws software. ICT also provides specialised LANs for students with disabilities and facilitates on-line exams for these students. Many of the services provided by the different service sectors are interrelated. An efficient ICT department can help streamline communication among the various service sectors

which improve overall service delivery to students (Institutional Audit Portfolio University of KwaZulu-Natal, 2008: 199-209).

### **3.3.2.2 Other support services**

Other support services that are integral to support the core services of teaching and learning include Student Funding; Student Housing; Student Representative Council offices, Student Counselling and Careers Development Centres; and other faculty learning centres; etc. Shanker (2002: 574) indicates that the support services provided by a university enhance the value of the core product and help differentiate the service offer from other comparable offers.

Other support services provided by the University are as follows:

#### **a) Student Funding**

Students who are financially disadvantaged may apply for student funding. The student funding staff assists students who are in financial need by processing their application for a loan, bursary or scholarship (Institutional Audit Portfolio University of KwaZulu-Natal, 2008: 265).

#### **b) Student Housing**

The University staff who manages student housing strive to provide students with safe, affordable accommodation. UKZN has built new residences and maintains existing student accommodation on its campuses. Private accommodation has also been provided by Student Housing (Institutional Audit Portfolio University of KwaZulu-Natal, 2008: 2008: 266).

#### **c) Student Representative Council (SRC)**

Each campus has an SRC which supports and promotes the well-being of students. The SRC members and their committees are the voice of the student population on the various campuses. As such they render an important service to students. They listen and assist students with grievances. Good leadership is thus required from the SRC executive and their various committee members (Institutional Audit Portfolio University of KwaZulu-Natal, 2008: 268 - 271).

d) Student Counselling Centres, Career Development Centres and other Faculty Learning Centres

Students also have access to student or career counselling services. Wellness Centres provide students with counselling and career development. Trained staff is in place within these centres to help students cope with traumatic issues like rape; HIV/AIDS; grief counselling; dealing with challenges in their studies; or other everyday issues a student may face while studying at the University.

Students are offered personal and group counselling as well as psychotherapy services at these centres. Each counselling centre has a Disability Support Unit that provides services to disabled students at all campuses. Students with disabilities are assisted in adjusting to the challenges of coping with university life. A physiotherapy programme is also in place to help students with physical disabilities.

Workshops on time management, note taking, essay writing, exam preparation, career choices and interviews are also presented by the Student Counselling and Career Development Centres. Graduate recruitment programmes are offered; these provide students with opportunities to interact with employers. Successful candidates are placed in well-recognized graduate programmes at various companies and organizations. Career Development Centres also offer students part time positions on the various campuses. ASAP and the Writing Place are other services provided by the University that help students to structure their study timetable and provide tips on how to study and how improve their writing skills (Institutional Audit Portfolio University of KwaZulu-Natal, 2008: 261-269).

e) Student Health Clinics

Clinics on each of the five campuses provide students and staff with primary health care. Their services include birth control, monitoring pregnant students and treating sexually transmitted diseases (Institutional Audit Portfolio University of KwaZulu-Natal, 2008: 261-269).

f) HIV/AIDS Programme

UKZN has developed an HIV/AIDS policy. The HEARD together with other University structures are involved in voluntary counselling and voluntary testing and conduct education programmes on HIV/AIDS (Institutional Audit Portfolio University of KwaZulu-Natal, 2008: 261-269).

#### g) Student Transport Services

Students and staff have access to a shuttle service that operates daily between the Howard College and Westville campuses. Transport is also provided for the medical science students to their campus and residences (UKZN Annual Report, 2010: 88).

#### h) Risk Management Services (RMS)

RMS protects the property, equipment and students and staff on all five UKZN's campuses and provides twenty-four hour security rooms that operate seven days a week. An outside security company is also employed to maintain safety and security on all five campuses. The main duties of RMS are to provide campus security; conduct investigations; handle traffic and parking on campus; and issue students and staff with student cards and parking disks (Institutional Audit Portfolio University of KwaZulu-Natal, 2008: 268).

#### i) International Student Offices

UKZN actively recruits international students from neighbouring countries in Africa, Europe, Asia and South America. The International Office assists international students with their registration, housing and acclimatizing to a foreign country (UKZN, 2012).

#### j) Sports Amenities

The University provides various sporting facilities to students and staff. However, there are no indoor sporting facilities on the Pietermaritzburg campus. Students at the Nelson R. Mandela School of Medicine use the facilities on the Howard College campus. Gyms are provided at some campuses. A student opinion survey carried out at UKZN's five campuses identified the need to upgrade the gymnasiums and equipment on all campuses (Institutional Audit Portfolio University of KwaZulu-Natal, 2008: 278).

#### k) Other Amenities

At most campuses students have access to bank facilities; vending machines; cafeterias; food vendors; and shopping centres. The Westville campus is redeveloping the Makhabane Shopping Centre and building a new food court for students (Institutional Audit Portfolio University of KwaZulu-Natal, 2008: 278).

## 1) Corporate Relations

This division manages the reputation and image of the University. It promotes UKZN via media and corporate events, provides and brochures on the University to students, parents and other community stakeholders. This division is the face of the University and it keeps the campus community and the public aware of upcoming events at the University (UKZN Annual Report, 2010:71-73).

The above discussion illustrates that UKZN provides comprehensive services that touch on many aspects of student life. The actual services students choose to avail themselves of may differ depending on individual needs. Ganesan-Lim, Russell-Bennett and Dagger (2008: 550) observe that quality perceptions may vary from one segment of a population to another, primarily because individual consumers perceive services differently. For example at UKZN, students who pay their own fees as opposed to students on financial aid will have different perceptions of student funding services. Students who are dependent on student funding would actively engage with the staff involved in student funding services whilst other students would have no contact with such services at all during their time at the University.

Shanker (2002: 581) states that the key to improved education service delivery is not that it is performed *by* people but that it is performed *for* people. The strategies that UKZN has adopted to develop such services have at their core students' best interests.

### **3. 4 Approaches to managing service quality at UKZN**

UKZN's approaches to managing quality take place at three levels: in the academic sector; in the support sector; and in the Quality Promotion and Assurance (QPA) Office. Individual performance appraisals are conducted on staff at all levels in the organization. The UKZN the Performance Management System has recently put in place. If employed effectively this system will help improve overall service quality within the University. Staff should align their own individual goals to those of the institution. For example, quality is viewed in a holistic manner; academic staff should provide high quality academic services to enhance students' teaching and learning experience. Support staff, on the other hand, should provide efficient support services and utilize systems and processes effectively to provide quality services that support teaching and learning in order to enhance students' experiences. If staff experience problems in teaching or support staff experience a problem in effectively and efficiently providing their service, a good Quality Management System can help them address these issues through training and

coaching. Since the QPA Office is responsible for the performance management system in place at the University, this area will be discussed further in the section on the QPA. Approaches to managing quality in the academic, and support sectors and the QPA Office are discussed below (UKZN, 2012).

### **3.4.1 Approaches to managing service quality in the academic sector**

Managing quality in the academic sector rests with the UKZN Senate. Senate delegates this responsibility to various subcommittees. One such subcommittee is the University Teaching and Learning Committee (UTLC). The UTLC is involved in policy development, advocacy, monitoring and special projects, with clear implications for maintaining the management of quality within the academic sector. A College Quality Committee is based in each college. It is concerned with all quality related matters with respect to educational provision. The DVC of each College chairs this committee. The aim of this committee is quality monitoring and quality promotion; it also performs an advisory function. The College Quality Committee ensures the maintenance of quality in newly developed modules and programmes. It also considers external school review reports and monitors the implementation of their recommendations. Faculty level committees have also been put in place to ensure that academic standards for modules and programmes are high and consistent across the different sites of delivery. The function of these committees is to ensure curriculum quality at the module and programme levels. The committee identifies new teaching programmes, develops appropriate curricula, including standards of assessment and promotes multidisciplinary teaching programmes within the respective faculties and between faculties. The responsibilities of this committee are managed in Faculties through Quality Committees or Teaching and Learning Committees (for undergraduate study) and through Higher Degrees Committees (for postgraduate study); these committees are generally chaired by the Dean or Deputy Dean within the respective Faculties. At School level, a Quality or Teaching and Learning Committee is set up within each School to manage the School's quality issues. Issues relating to teaching and learning are also discussed at the School Board of Studies (Institutional Audit Portfolio University of KwaZulu-Natal, 2008:62-63).

Academic quality is a core service provided to students at the University. UKZN has put a number of processes in place to review academic quality. Students can evaluate academic quality by completing questionnaires on modules. These questionnaires for each module are administered by the academic support staff responsible for that module. The completed questionnaires are then sent to QPA Office, which analyzes the responses and provides a feedback report to the School. This process gives students an opportunity to evaluate and comment on both the module and the lecturer who facilitates the module. The student feedback



reports are also used in performance management when staff performance is reviewed by Line Managers (Institutional Audit Portfolio University of KwaZulu-Natal, 2008:64).

The second process to review academic quality is through an External School Review. This requires a School to prepare a self-evaluation document. Submissions are sought from a variety of constituencies and a panel of external and internal peers (there is a representative from the Faculty, but not the School concerned) and interviews are conducted with a variety of stakeholders over three days. The panel also undertakes a documentary scrutiny. It then produces a report that is presented to the School, the Dean, the DVC, the relevant Faculty Committees and the College Quality Committee. The process is managed by the QPA Office, which also provides the panels with ongoing support. The College Quality Committee is the main body that monitors the implementation of recommendations that emanates from the Review Committee. The Student Representative Council (SRC) can also participate, sharing their concerns relating to academic quality with this committee.

UKZN encourages student feedback on issues associated with academic quality and encourages students to contribute to the External School Review. Staff who is dissatisfied with any aspect of academic service can also present views at this Review. The main aim of an External Review is to evaluate academic quality and integrity in teaching, the curriculum and support of teaching within the School (Institutional Audit Portfolio University of KwaZulu-Natal, 2008:64-65).

The third quality management process in the Academic sector is the external quality and accreditation processes. Since the merger, several accreditation visits have taken place. The HEQC re-accredited the MBA. Other accreditations took place in the MEd and other teaching education programmes; M Sc in Food Security; B Sc in Dietetics; and B Sc Eng (Computer Engineering).

The fourth quality management process is benchmarking. In terms of external benchmarking, the UKZN is an active participant in a benchmarking association made up of nine South African institutions (Institutional Audit Portfolio KwaZulu-Natal, 2008:64-65). The discussion below highlights the benchmarking conducted in some of UKZN's Faculties. The intention of benchmarking is to maintain and improve quality standards in academia so that students can be assured of the quality of the University's educational offerings (Institutional Audit Portfolio University of KwaZulu-Natal, 2008:65).

According to the Institutional Audit Portfolio University of KwaZulu-Natal (2008:66-67), the following Faculties have been benchmarked:

- Education

The Council for Higher Education (CHE) accreditation review process provides an important national mechanism for Faculties of Education to benchmark against each other. A further strategy for benchmarking as part of this HEQC process has included the overall national reports developed for each qualification by the HEQC following the accreditation reviews. Benchmarking against other Faculties of Education is facilitated by the Faculty of Education Deans' Forum which is a substructure of HESA which meets each quarter.

- Science and Agriculture

Internal (University) benchmarking has a useful, if limited purpose and through the Division of Management Information (DMI) and the Research Office, this information has been used by UKZN as an indicator of operational practice and success. These include success rates (module pass rates); undergraduate and postgraduate graduation rates; and research publication rates. The Faculty participates in the University School Review Process. Its administrative procedures have been used by other Faculties as their benchmarks. The Faculty actively participates with other University Faculties and structures establish best practice, e.g. the University Teaching and Learning Committee; the Access Steering Committee etc. Besides the national benchmarks in the National Plan for Higher Education there are few agreed national indicators of success and quality against which the Faculty can measure its operations. In this regard the newly constituted National Science Deans Forum has developed national benchmarks for many procedures and indicators of success for Science in South African universities. National benchmarking of Science Access programmes and UKZN's high success rates have enabled the Faculty to significant outside funding for its access students.

- Medical School

There is no active benchmarking outside of external examiners. However, issues discussed in the Committee of Medical Deans have an impact on the Faculty's operations and vice versa. In 2007, the Faculty Officer and senior staff attended a meeting where the administrative processes of several medical schools were compared. UKZN's largest postgraduate medical programme was benchmarked through comparison of their examination results with those of other medical schools.

- Management Studies

Benchmarking with other Faculties and institutions is currently based on the needs of particular disciplines. For example, the School of Public Administration offers a BAdmin programme which is benchmarked against other Schools in Public Administration of good standing. The

School is a member of the JUPMET consortium of Schools of Public Administration and undertakes joint programmes with other JUPMET members. The Graduate School of Business is a member of the South African Business School Association. The School of Accounting works closely with professional bodies such as SAICA and CIMA. The School of Information Systems and Technology is a member of SACLA. Membership of these organizations does not automatically provide benchmarks, but does provide opportunities to discuss quality issues with other professionals and academics associated with these disciplines.

- Law

The Faculty has adopted a number of mechanisms aimed at benchmarking its operations with other Faculties and, in particular with the legal profession. Amongst the most important of these are that the Dean is a member of the South African Law Dean's Association (SALDA), and that the Director of Legal Education and Development (LEAD) of the Association of Law Societies of South Africa is an ex-officio member of the Faculty Board. The Faculty recently underwent an External Review organised by the QPA. In addition, the Faculty is part of the College of Law and Management Studies, together with the Faculty of Management Studies. The programmes offered by the Faculty of Management Studies also lead to a professional qualification. The Faculty has accordingly, benchmarked its operations with the Faculty of Management Studies, in order to apply better practices and to standardize operations amongst the two Faculties that make up the College. Finally, it is also important to note that the new LLB curriculum was designed in consultation with representatives of the legal profession as well as persons involved in training at the Practical Training Schools. As their name indicates the Practical Training Schools prepare candidate attorneys for admission to the profession. The new LLB curriculum, accordingly, complies with LEAD's Profile of a Legal Profession which outlines the learning assumed to be in place when LLB graduate apply for admission to the legal profession.

- Engineering

The Faculty of Engineering's programmes are benchmarked with similar Faculties in the country through the Engineering Council of South Africa (ECSA). The ECSA is a signatory to the Washington Accord which ensures that accredited degrees are recognised internationally (Institutional Audit Portfolio University of KwaZulu-Natal, 2008:66-67).

Many Schools at UKZN practice an open door policy to improve overall service quality through students consulting with staff on a regular basis. The staff set consultation times to handle student queries. Students also have access to the lecturer's office telephone number and e-mail addresses so that they can obtain answers to any questions they might have. Some Schools also use Moodle, SMSs and pod casting to communicate with their students.

When students evaluate service quality, they should be aware of the University's commitments and approaches to managing the academic aspect of service quality that is included in its strategy. The UKZN Strategic Plan 2007-2016 (2007: 20 - 21) outlines following strategies to provide quality academic services to students.

- Meet the needs and expectations of students both pre- and post- enrolment

The University recognises that successful recruitment and retention of students is a key constituent of its reputation and that this is dependent on its ability to meet the needs and expectations of students both pre- and post- enrolment. There is increased expectation amongst prospective students (and employers) that tertiary education to be relevant to the job market and that tertiary education institutions should balance vocational education with curricula informed by research and scholarship. The University will review its curricula on a regular basis to ensure that they are of a high academic standard, current and relevant and meet the requirements of prospective students, employers, academics and society.

- Engage meaningfully with students

The University will develop and implement a staff and student learning contract outlining the expectations, entitlements and responsibilities of both staff and students in respect of their interaction and obligations, in order to promote an ethos of caring and accountability based on mutual respect.

### **3.4.2 Approaches to managing service quality in the support sector**

The Support sector refers to the libraries; ICT; student admission and registration; student records and certification of qualifications; timetabling and venue allocation; examinations; Corporate Relations; Risk Management; student funding centres; student housing offices; international student offices; student counselling and career development centres; student health clinics; sports administration; the student discipline office; and the SRC offices. There are no clear guidelines on quality for each service unit; however there are policies and procedures that each unit has to uphold in providing service excellence in their delivery of services to students.

The University strategy for providing quality services will be discussed as this strategy highlights the University's commitment to service quality within the support sector. When

students evaluate service quality they should be aware of the University's commitment and approaches to managing the support aspect of service quality.

The UKZN Strategic Plan 2007-2016 (2007: 20 - 21) outlines the following strategies to enable support staff to maintain and provide quality services to students:

- Meet the needs and expectations of students both pre-and post-enrolment

The University will implement professional, robust and efficient recruiting and admission processes focused on the student. It will streamline student academic administration and access to information by re-engineering processes in accordance with student needs and usage, and by the judicious development of on-line processes and electronic information centres.

The University acknowledges that effective academic support is essential to attract and retain students, and it will provide a range of student-focused initiatives that will enhance the learning experience. The University has access to flexible, responsive support systems, and learning systems, and learning environments that enable students to complete their studies successfully.

- Engage meaningfully with students

Recognising the importance of effective two way communication, the University will engage meaningfully on a regular basis with all student structures, as a mechanism for assessing, monitoring and reacting to the concerns of a broad base of students, and keeping abreast of their changing needs.

- Create conducive learning and social environments for students

The University will provide excellent learning facilities on all campuses, accessible 24 hours a day, which stimulate intellectual engagement and provide a learning context conducive to holistic student development that respects a diverse range of educational experience and needs.

The University will provide safe and secure residential options, social spaces and amenities equipped and run with students in mind which are geared to the changing needs of all students.

The University will expand opportunities for students to enjoy an enriched campus experience through extra-curricular activities, and will provide excellent services to meet student needs for welfare, health care and counselling.

### **3.4.3 Quality Promotion and Assurance (QPA)**

The QPA Office replaced the former Quality Assurance office of the University of Durban – Westville and the Quality Promotion Unit of the former University of Natal. These units were merged in 2005 to form the QPA. According to Whiteley (2001: 7) the duties of a quality assurance unit should include encouraging and supporting self-assessment; organising quality assurance reviews of academic programmes and conducting audits of the learning environments which may include audits on staff and student liaison committees and other facets of student participation; careers advice systems; academic and personal tutorial systems; registration procedures; provision of information technology resources; operation of libraries; operation of laboratories; and staff development and training.

Although this list is very general, UKZN's quality assurance system is more specific in nature. The functions of the QPA Office at UKZN are to be integrally involved in initiating and developing a number of policies through which quality assurance is given effect. Policies on quality are integral, as they help staff at the University know what is expected of them.

In early 2005, the QPA Office undertook advocacy work for the inclusion of quality in Faculty planning. Much of this work involved conscientizing staff on quality issues and getting them included in the multiple planning processes that were underway at the time. This made the process more transparent and all parties were able to provide input into this important process.

QPA Office staff provided direct support to a Faculty undergoing re-accreditation by the HEQC and professional bodies. It is imperative for certain faculties like Engineering and Accounting to have accreditation. Recruiters check for accreditation of these degrees by professional bodies before taking on students. Students who want to study for certain degrees need to check that they are accredited before they register.

The QPA Office also assists with External School Reviews. QPA Office staff assists staff in compiling their teaching portfolios (all academic staff applying for or being nominated for promotion are required to have a formally assessed teaching portfolio) and advise all the Faculty Teaching Portfolio Evaluation Sub-committees. The QPA Office is also represented on the Distinguished Teachers Awards committee that makes four awards annually. Apart from the assessment of teaching portfolios noted above, the QPA Office assists individual staff with teaching problems at their request or the request of Heads of School. The QPA Office also processes student feedback reports. They assist with programme and module development, approval and registration. Background development work in developing templates and on-line

systems is in process, and has been facilitated by the HEQC/Finnish grant. The office also conducts support sector reviews and quality or strategic planning workshops.

The QPA Office runs institution-wide surveys to provide feedback to feed into quality processes. In 2005, some 4 000 students were surveyed on their views of a variety of student services to ascertain student opinion on quality of education. An graduate survey is also conducted at the 21 annual graduation ceremonies. A report on the responses from some 2 000 to 4 000 graduates is produced every year. The QPA Office has initiated the development of a document management system to assist UKZN to collate, organize and analyze the many policies produced and to provide documentary evidence for the Institutional Audit (Institutional Audit Portfolio University of KwaZulu-Natal (2008:69-70).

The QPA Office also manages the Performance Management system. The Performance Management System was established at UKZN in place in 2010. A lot of work is still required to develop performance objectives for academic, administrative, support and management staff. Each Faculty has come up with their own objectives and this makes it difficult to benchmark quality performance; however certain objectives like teaching, research, administration and community outreach form focal areas and are common amongst all academics within the different Faculties. Non-academic staff performance objectives are still being formalised and finalised by various departments within UKZN (University of KwaZulu-Natal, 2012)

According to Deb (2008: 105) the following are different sources of performance appraisal that an organization can utilize:

- A combination of group and individual appraisal: Performance appraisal evaluates employees who frequently aspire to improve their performance rather than their services. To avoid this situation, teamwork is necessary. In some cases, individual appraisal is needed and in others, group appraisal. Sometimes there is a mismatch between a manager's own performance and the group's. In such cases, individual appraisal should improve the individual's performance whereas the appraisal of the group alone may obscure the problem. The difference between the two is that individual appraisal is confidential, appraisal whereas group appraisal is shared amongst all the team members. This approach is more conducive in a commercial setting than a university setting.
- Appraisal by supervisor: This is the most common appraisal method and is based on the norm that the manager is the best judge of his/her team member's performance. This type of appraisal can be applied to UKZN staff.

- Self-appraisal: According to Heery and Noon (2001), self-appraisal is the technique of evaluating one's own performance and then discussing this with one's line manager. Self-appraisal is useful when managers seek to increase an employee's involvement in the performance appraisal process. This method of appraisal is employed at UKZN.
- Peer- review: This system of appraisal has been in existence since the 1920s. It is based on the assumption that co-employees who perform similar tasks are more knowledgeable about the work than a manager and are in a better position to evaluate it. However, there is a natural conflict of interest inherent in a peer review, which can result in either positive or negative bias, depending on the situation. For academic conferences, NQF research ratings and publication of journal articles peer-review can be used at the University.
- Upward appraisal: By virtue of their frequent dealings and interactions with their manager, employees can evaluate them better. However, employees may use this system to harm or backstab their managers. This type of appraisal is not used at UKZN.
- Multi-source assessment: This system provides employees with as much objective information as possible by obtaining inputs from all angles, including superiors, subordinates, peers and customers (internal and external), where different aspects of the work are assessed by different people. This type of appraisal is too difficult to apply to a university setting.
- Benchmarking: This is a continuous process of measuring products, services and practices against recognized competitors with the objective of rectifying performance gaps. Meaningful benchmarking should take place between organizations with similar goals and characteristics in order to deliver similar services to their customers. Benchmarking can enable organizations to identify better performance appraisal procedures and systems and re-design their own evaluation system for increased effectiveness and utility. Benchmarking is used extensively by certain UKZN Faculties to maintain quality within their degree offerings.

It is impossible for all these sources of performance appraisal to be utilized by UKZN. The University's Performance Appraisal System for staff and management utilized the benchmarking of performance appraisal systems employed within other universities. The most common method of performance appraisal utilized by the UKZN is self-appraisal. Here, a staff member evaluates their own performance by developing their own KPAs and they discuss them



with their line manager. Thereafter, the line manager scrutinizes the staff's KPAs and approves/rejects the self-appraisal. This is a useful technique as staff are more involved.

### **3.5 Summary**

This chapter provided a brief overview of UKZN and a detailed discussion on UKZN's five campuses, its management structure and its mission and goals with respect to quality. A brief history of the University before and after the merger and the re-Organisation of the University structure were outlined and discussed. Services provided by a university were highlighted.

Lastly, the approaches to managing quality at UKZN were explored.

The next chapter will discuss the research methodology employed to conduct this research study.

# **CHAPTER FOUR**

## **RESEARCH METHODOLOGY AND DESIGN**

### **4.1 Introduction**

This chapter presents the research methodology used to collect and analyze data for this study. According to Leedy (1985: 91) methodology is an operational framework within which the facts are placed so that their meaning can be determined more clearly. This chapter outlines the research method; research problems and sub-problems; hypotheses; data collection instrument; design of questionnaire; pilot study; population; the sample and the sample method.

### **4.2 Research method**

Both secondary and primary research methods were used to collect data for the study.

#### **4.2.1. Secondary research methods**

Secondary data: This consists of a literature study of the most recent texts, papers, journals articles, UKZN documents (Faculty Brochures; Strategic Plan Documents; Merger Report 2007; and Annual Report 2004-2007) and Government Acts. This review produced theories, principles, themes and benchmark practices to evaluate the service quality perceptions of staff and students at UKZN.

According to Cavana, Delahaye and Sekaran (2002: 61) the literature review provides a foundation on which to develop a conceptual or theoretical framework in order to examine a problem in a useful and creative way. This in turn helps to develop testable research questions or hypotheses that would substantiate or disprove a theory. The foundation for the study was based on the SERVQUAL instrument and the GAPS theory that was developed in 1984 by Parasuraman, Zeithaml and Berry. The study aimed to measure responsiveness; reliability; tangibles; assurance; and empathy. This research study also tested if any quality gaps existed in the way staff and students perceived the above quality variables.

#### **4.2.2. Primary research methods**

This study adopted a quantitative research method. A survey was used to gather primary data from respondents. This study surveyed students and staff at UKZN to determine their perceptions of service quality. According to Zikmund (2000: 167 - 168) surveys involve asking respondents for information, using either verbal or written questions. The survey is thus defined as a primary data collection method based on communication with a representative sample of individuals. Surveys are a quick, inexpensive, efficient and accurate means of obtaining information about a population.

#### **4.3 Statement of the problem**

##### **4.3.1 Research Problem**

Measuring service quality within tertiary institutions is an indicator of whether students and staff are satisfied or dissatisfied with the services offered.

##### **4.3.2 Sub-problems**

From the research problem above, the sub-problems listed below will be addressed.

The extent to which:

4.3.2.1 The various service quality models apply to tertiary institutions;

4.3.2.2. The SERVQUAL model is relevant in identifying gaps in UKZN's service delivery;

4.3.2.3. Students perceive the quality of the service offerings;

4.3.2.4. Staff perceive the quality of the service offerings; and

4.3.2.5. Management and staff at UKZN can improve service quality within the University.

#### **4.4 Objectives of the study**

4.4.1 To identify models of service quality that may apply to tertiary institutions.

4.4.2 To identify students' perceptions on quality variables with respect to tangibles, reliability, responsiveness, assurance and empathy.

4.4.3 To determine students' expectations of the quality of tertiary education services.

4.4.4 To identify staff perceptions on quality variables with respect to tangibles, reliability, responsiveness, assurance and empathy.

4.4.5 To assess UKZN's staff expectations of the quality of tertiary education services.

4.4.6 To examine the size and direction of any quality gaps found between staff and students.

4.4.7 To examine the size and direction of any quality gaps found between academic and non-academic staff.

#### **4.5 Key questions pertaining to the study**

4.5.1 What models of service quality are identified in the study and which of these can be used for tertiary education services?

4.5.2 What are UKZN students' perceptions of quality variables such as tangibles, reliability, responsiveness, assurance and empathy?

4.5.3 What are students' expectations of the quality of tertiary educational services?

4.5.4 What are UKZN staff's perceptions of quality variables such as tangibles, reliability, responsiveness, assurance and empathy?

4.5.5 What are staff's expectations of the quality of tertiary education services?

4.5.6 What are the size and direction of any gaps found between staff and students?

4.5.7 What are the size and direction of any gaps found between academic and non-academic staff?

#### **4.6 Hypotheses**

The hypotheses below will be tested in this research study. The research will show which of the hypotheses are valid and accordingly, will be retained.

4.6.1 H1-There is a statistically significant difference in the perceptions of the service quality dimensions amongst the biographical data variables for the staff and students respectively.

4.6.2 H2-There is a statistically significant difference in expectations of the service quality dimensions amongst the biographical data variables for staff and students respectively.

4.6.3 H3-There is a statistically significant difference in the service quality gaps amongst Staff and students.

4.6.4 H3.1-There is a statistically significant difference in the service quality gaps for academic and support/administrative staff.

4.6.5 H3.2-There is a statistically significant difference in the gaps scores between male and female students.

4.6.6 H3.3-There is a statistically significant difference in the gaps scores between undergraduate and postgraduate students.

4.6.7 H3.4-There is a statistically significant difference in the gap scores amongst the local and international students.

4.6.8 H3.5-There is a statistically significant difference in the gap scores amongst the students on the different UKZN campuses.

4.6.9 H3.6-There is a statistically significant difference in the gap scores between male and female staff.

4.6.10 H3.7-There is a statistically significant difference in the gap scores between permanent and contract staff.

4.6.11 H3.8-There is a statistically significant difference between the gap scores for the general questions amongst students.

4.6.12 H3.9-There is a statistically significant difference between the gap scores for the general questions amongst staff.

This study addresses the above research problem, sub-problems, objectives of the study, key research questions and hypotheses. Students and staff at UKZN were surveyed for their views on different aspects of quality. The study is a scientific enquiry which included the following research design: case study method, a data collection instrument; designing of questionnaire; a consideration of the target population for the staff and student respondents, respectively; the sampling method and sample size; and the data collection methods.

#### **4.7 Case Study Method**

According to Creswell (2012:465), a case study is an in-depth exploration of a bounded system (e.g., activity, event, process, or individuals) based on extensive data collection. For the purposes of this study the case-study method was employed.

Cooper et al (2006:217) argue that the case-study method is a powerful research methodology. Researchers select specific organizations or situations to profile because these examples or subjects offer critical, extreme, or unusual cases. The case study method formed part of the study's research design.

According to Weman et al (2005:25), a case study involves an in-depth and detailed study on a single organization in order to create a better understanding of the uniqueness and characteristics of a particular case in all its complexity. In this study, the case study approach was employed where staff and students at UKZN's five campuses were asked to express their perceptions of the service quality of the University's numerous service offerings.

The main strengths that outweighed the few weaknesses in using this approach are cited by Gravetter and Forzano (2009:377). As this design is not average over a diverse group, it offers detailed description, is vivid, powerful and convincing, can study rare and unusual events and

can identify exceptions to the rule. The weaknesses of case-study design are its limited generalization, potential for selective bias and potential for subjective interpretation. Despite these shortcomings, the researcher felt that the case-study approach was appropriate in this study.

#### **4.8 Data collection instrument**

A survey was designed with the purpose of collecting data from students and staff on their perceptions of service quality at UKZN. A self-administered questionnaire was used. Two questionnaires were developed to target students and staff separately.

According to Zikmund (2000: 214), a self-administered questionnaire is often delivered by mail. However, self-administered questionnaires may be delivered personally, administered at a central location, sent via e-mail or administered via computer.

The researcher and fieldworkers delivered the questionnaires to the respondents personally or administered them at central locations, via e-mail or via internal campus mail. The researcher and field workers administered the questionnaire at all five UKZN campuses, namely; Edgewood; Howard College; Pietermaritzburg; the Nelson R. Mandela School of Medicine; and Westville. With respect to the student respondents, the researcher visited some lecture halls after gaining permission from the relevant lecturers and conducted the survey. The researcher employed fieldworkers who did drop-off surveys in order to reach more students. Here the questionnaires were left with students who frequented the library; computer LANs; cafeterias; and student residences on the five campuses and were collected by the fieldworkers at a later date once they were completed.

The staff respondents were approached in two ways. Firstly, the researcher and fieldworkers did drop-offs of the questionnaires at staff offices on UKZN's five campuses. Secondly, the researcher used the University's internal telephone directory and telephoned staff asking them to participate in the survey. Once they agreed to participate, the questionnaire was posted or e-mailed to them, according to their preference. To increase response rates from staff, the researcher included a self addressed envelope to return the completed questionnaire.

The advantage of using a self-administered questionnaire was the low costs involved and the flexibility with which it allowed the respondents to complete the survey.

The next section discusses the sample technique and measurement errors and indicates how these were avoided in the study.

Berndt and Petzer (2011: 149 - 153) indicate that survey research can contain sample design errors and measurement errors. These are discussed below to indicate how they were avoided in this study:

#### Sample design error

- Sample frame error results from using an incorrect, outdated or incomplete sampling frame. Imagine researching whether a company's 2011 customers are happy with the service offering using a client base from 1990. Many individuals who were customers in 1990 may have stopped using the company's services or products, died or emigrated. To prevent the above error, the researcher administered the survey to students registered in 2010.
  
- Population specification error is a result of incorrectly defining the population under study. For example, if one were to consider dress code of all undergraduate students, it would be a mistake to draw a sample exclusively from first-year classes. By not talking to second -and third-year students, essential information would be lost. We cannot be absolutely sure that second- and third-year students adopt exactly the same dress code as first year students.

The researcher avoided the above error by conducting the survey on all the students at the University.

Both undergraduate and postgraduate students were asked to complete the survey. The questionnaire was also administered to local and international students at all five campuses. The staff survey was also conducted on all five UKZN campuses. Staff from the various academic and non-academic areas was asked to voluntarily participate in the survey.

- Selection error can occur even when the sampling frame is correct and population specification error has been ruled out. Here there is a risk that the researcher may use his/her judgement to unnecessarily exclude certain people from the sample.

In this study the researcher and her assistants were not biased in favour of any student or staff on any of the UKZN campuses. No group of staff or student was excluded because of personal bias. The researcher and fieldworkers administered the surveys to any student or staff member on any of the five campuses who were willing to participate in the survey.



## Measurement error

- **Research objectives:** Research objective confusion may be caused by an ambiguous idea as to what is fundamentally driving the research. In order for specific answers to be obtained, a problem statement needs to be well defined and understood. If there are discrepancies in this regard, the information obtained may be practically useless.

Firstly, for this research study the problem statement and sub-problems pertaining to the study were clearly outlined. Secondly, this study's research objectives were then clearly defined.

- **Questionnaire design bias:** Leading statements and questions in the research instrument can wreck havoc with the eventual survey findings. The questionnaire therefore needed to be carefully checked internally, and vetted by experts outside of the research project, so that the wording of the questions did not influence respondents in one direction or another.

Accordingly, for this study leading questions in the research instrument that would influence the respondents were avoided. The questions were double checked by peers and then presented to the UKZN Faculty of Management Research Ethics Committee for ethical clearance.

- **Sample error:** Sample selection error is an error that comes about in the selection in the sample, either through errors in the design of the sample or in the way in which the members of the sample are selected (Zikmund and Babin, 2010: 153). If questionnaires were distributed to a designated sample of students on a specific day of the week, those not present on that day would not be able to take part in the research study. In order to avoid this error the questionnaires were distributed to students on different days and at various venues. In this way every student had a chance to participate in the study equally. For staff, the researcher and fieldworkers went from office to office on all five campuses asking staff to participate in the survey.
- **Interviewer cheating:** Here the interviewer answers either a part of the questionnaire or even the entire questionnaire instead of the respondents. A reason for this may be that the data can be captured more quickly. However, the answers are not representative of the respondents, and are therefore not acceptable. It has been suggested that the way fieldworkers are paid may encourage this as they are paid per completed questionnaire

(Burns and Bush, 2006: 193). One way to ensure that the fieldworker does not do this is to conduct checks amongst some of the respondents that they did actually complete the questionnaire.

In this study, the researcher employed fieldworkers to hand out the questionnaires and collect them after completion. The researcher called staff to check whether they took part in the survey. For students, the researcher paid visits to the venues where fieldworkers were handing out or collecting questionnaires. Fieldworkers were trained not to cheat. An entire year was dedicated to fieldwork, i.e. administering and collecting the questionnaires.

- Interviewer bias: Interviewer bias occurs when the interviewer does not write down what the respondent says accurately, or misses some of what they said and then writes down what they remember (Zikmund and Babin, 2010: 153). Misunderstandings sometimes occur through poor communication between the researcher (who designed the questionnaire) and the fieldworker (who collects the data). At other times, this can be due to poorly devised instructions in the various sections of the questionnaire. Another error that may come about is when the interviewer leads the respondent. This means that the fieldworker influences what the respondent says.

In this research study, the researcher and fieldworkers were not involved in any interviewer bias. The instructions were clearly defined for each section of the questionnaire. The researcher trained the fieldworkers not to influence the respondents in any way. The respondents were knowledgeable UKZN staff and students who had their own opinions on service quality and were not influenced by the researcher or fieldworkers when completing the survey.

- Data processing error: Here the person capturing the responses records or captures the responses incorrectly. The captured data do not correspond with the information supplied in the questionnaire, which means that the analysis and findings do not accurately represent the responses given. This can be intentional but in most cases is unintentional. Unintentional errors may occur due to time pressures to capture the data, incorrect computer programming, or through simple mistakes.

To avoid the above error the researcher employed a qualified data capturer. This expert was given three weeks to work with, thereby avoiding time pressure. Furthermore, the researcher went through the questionnaires to make sure that they were complete before

they were given to the expert to capture. The researcher also coded the questionnaires for staff and students respectively, so that these two samples would not be mixed up.

- Respondent bias: Respondent bias occurs when respondents misrepresent the truth out of fear or for personal gain.

To avoid this bias, the researcher and fieldworkers were polite to respondents who were asked to voluntarily complete the questionnaire. The respondents were not given anything to influence their opinions.

- Non-response bias. It is very unlikely for a survey to obtain a 100% response rate. If 2 000 questionnaires are sent out and only 700 people respond, the response rate is 35%. Similarly, the refusal rate (the percentage of people who did not respond) is 65% (i.e. 100% minus 35%). Unfortunately, certain categories in the sample may be overrepresented or underrepresented. It is also possible that certain groups may have been alienated by the nature of the study. Some in the sample may, on principle, not wish to complete a questionnaire.

For this study, the researcher achieved a 100% response rate for the student sample and a 73% response rate for the staff sample. Since the respondents were asked to participate on a voluntary basis, the researcher had no control over non-response bias.

#### **4.9 Design of questionnaire**

The research instrument employed in the survey was the questionnaire. Two questionnaires were designed: one for students (Questionnaire One) and the other for staff (Questionnaire Two). Copies of these questionnaires are attached Appendices B1 and B2.

The questionnaires satisfied three important objectives highlighted by Rossi (1983: 84) highlighted. These are as follows:

- It should meet the aims of the research;
- It should reflect accurate information regarding the research study; and
- It should be executable within the time and resources available.

Huysamen (1996: 131 - 132) suggests that questionnaires should be formulated to maintain the following neutrality features:

- Avoid leading questions. A leading question is one which is formulated in such a way that it suggests certain responses rather than others. It usually begins with “Do you agree that...?” or “Are you satisfied that...?”
- Avoid loaded questions. A loaded question is a leading question in which social acceptability or unacceptability may likewise influence the respondent to reply in a particular manner.
- Facilitate responses which may be regarded as indicative of socially unacceptable attitudes or habits.
- Do not suggest the range of acceptable responses.
- Carefully consider questions about sensitive issues. For example, instead of asking respondents whether they have completed high school, they should rather be asked to indicate the highest school standard that they have passed. Similarly, respondents birth dates rather than their ages should be asked. Questions about income should preferably not require an exact amount but rather provide for different broad alternatives (in a multiple-choice format).

For this study, the above considerations were taken into account and the questionnaires were formulated in a neutral manner.

Cooper and Schindler (2006: 363) indicate that the order, type and wording of the measurement questions, the introduction; the instructions; the transitions; and the closure in a quality communication instrument should accomplish the following:

- Encourage each participant to provide accurate responses.
- Encourage each participant to provide an adequate amount of information.
- Discourage each participant from refusing to answer specific questions.
- Discourage each participant from early discontinuance of participation.
- Leave the participant with a positive attitude about survey participation.

These considerations were taken into account when designing the questions to ensure that respondents were encouraged to provide true and adequate information on their experiences of service quality at UKZN.

The questionnaire for the study contained a 5 Point Likert scale. The respondents were given statements which were either positively or negatively phased, relating to the attribute or objects under question and were asked to indicate their degree of agreement or disagreement.

The Likert scale was selected for this study because it could:

- show the strength of the respondent's feelings to whatever is in question;
- be easy to analyse;
- be easy to collect data from respondents;
- be more expansive; and
- be quick and less time consuming for respondents (Answers.com, 2011: 2).

Respondents were asked to rate each item according to a 1 to 5 response scale where: 1 = strongly disagree; 2 = disagree; 3 = undecided; 4 = agree; and 5 = strongly agree.

Hair, Wolfenbarger, Ortinau and Bush (2008: 155) argue that the Likert scale is best suited to a research design that is used in self-administered surveys, personal interviews or online surveys. The researcher used the Likert scale because it was compatible with the research design used in the self-administered survey.

Two questionnaires were designed: Questionnaire One for students and Questionnaire Two for staff.

In designing the questionnaires the following sections were developed:

- Section A: Demographic questions (Questions 1-11)
- Section B: Student/Staff Expectations of an excellent university (Questions 1-63)
- Section C: Student/Staff Perceptions of the services that the University offers (Questions 1-63)

For Section A, student and staff respondents were requested to provide their biographical data respectively. In Section A for Questions 1-12 in Questionnaire One, the biographical details of the student respondents were required, i.e., their age; gender; whether they were undergraduates or postgraduates; their years of formal education beyond high school; whether they were local or international students; their marital status; their highest academic or professional qualification; how many years they had been employed; which Faculty they were registered in; the factors that motivated them to study at UKZN; and which campus they were based at.

In Section A Question 1-11 in Questionnaire Two, the biographical details of the staff respondents were required, i.e.: their age; gender; marital status; years of formal education beyond high school; whether they were academic or non-academic staff; whether they were permanent or contract staff; their highest academic or professional qualification; how many years they had been employed; if academic staff, which Faculty they were employed in; if

support staff, which Faculty they were they employed in; which support staff structure they belonged to; and which campus they were based at.

In both Section B and Section C students and staff were asked to provide information on their perceptions and expectations of services rendered at UKZN so that the „gaps“ in the various service quality dimensions could be determined.

The questionnaires for staff and students respectively were adapted from the SERVQUAL instrument developed by Parasuraman et al (1984). The five quality dimensions formulated by Parasuraman, Zeithaml and Berry were adapted to the study.

Examples of the five quality dimensions that were tested in this study are as follows:

- Tangibles: including the physical components of the service, e.g. seating, lighting of lecture venues etc.
- Reliability: dependability of the service provider and accuracy of performance.
- Responsiveness: promptness and helpfulness of staff at the University.
- Assurance: knowledge and courtesy of University employees and their ability to inspire trust and confidence in students.
- Empathy: caring, individualized attention the University gives its students (Parasuraman et al, 1985: 41 - 45).

The expectation and perception questions were allocated to particular groupings. For Section B and C, for both questionnaires, Questions 18-21; 30; 32; 33; and 36-43 related to the tangible aspects of service quality for both expectations and perceptions. For Section B and C in the questionnaires, Questions 1-5 related to the reliability aspects of service quality. For Section B and C in the questionnaires, Questions 6-9 related to the responsiveness aspects of service quality. For Section B and C in the questionnaires, Questions 10-13; 23-26; 28; 29; 31; 34; 35; and 46 related to the assurance aspects of service quality. For Section B and C in the questionnaires, Questions 14-17 and 22 related to the empathy aspects of service quality. For Section B and C in the questionnaires, Questions 44 and 47-63 related to general questions on service quality and specifically on each potential service provider unit within the tertiary environment.

When designing the questionnaire an important consideration confronted by researchers is whether to use open-ended or closed-ended questions.

Reja, Manfreda, Hlebec and Vehovar (2003: 161) argue that open-ended and closed-ended questions differ in several respects, especially with regard to the role of respondents when

answering such questions. Closed-ended questions limit the respondents to the set of alternatives offered while open-ended questions allow the respondent to express an opinion without being influenced by the administrator of the questionnaire. Aaker et al (2001: 309) state that the advantages of using closed-ended questions are that they are easier and faster for the respondents to complete; interviewer bias would be eliminated; and data is easier to code and analyze. In this study the researcher opted to use closed-ended questions.

A covering letter was attached to each questionnaire. The covering letter politely requested the participation of the respondents. Refer to Appendices A1 and A2 and student and staff covering letter respectively.

The primary role of the covering letter is to obtain the respondent's cooperation and willingness to participate in the research project.

The researcher applied the guidelines indicated by Hair et al (2008:181) in the development of the covering letter for both Questionnaire One and Questionnaire Two. The covering letters were personalized to encourage participation. They identified UKZN as the name of the research organization conducting the survey.

It was clearly stated that the survey results were to be used towards the completion of a PhD study. The names and contact details of the researcher and supervisor were reflected on the covering letter. A clear statement of the study's purpose and importance was included. The research topic was also explained. The researcher affirmed in the covering letter that the prospective respondent's name would not be revealed and that confidentiality would be maintained at all times. The estimated time to complete the survey, i.e. 20 minutes was highlighted in the covering letter as it was important to ensure participation. The covering letter also emphasized the importance of the prospective student's and staff's participation in the survey. Through their participation the perceptions and expectations of service quality gaps at UKZN could be addressed. Respondents were thanked in advance for their cooperation.

Another important part of the covering letter was the instructions on how to complete the different sections of the survey. This page following the covering letter highlighted the objectives of the research study to the respondents and clearly outlined the sections and manner of completing the questionnaires.

Before the questionnaires were administered to the respondents, ethical clearance was received from UKZN and the researcher was given permission to conduct the research study. A copy of the ethical clearance letter is provided in Appendix D.

The study adhered to the specific ethical guideline outlined by Cavana et al (2002: 165) that the information provided by the respondent be treated as strictly confidential. A primary ethical responsibility of the researcher is guarding the privacy of the respondent. Another guideline was that researchers should not misrepresent the nature of the study to respondents.

Personal or seemingly intrusive information should not be solicited, and if it is absolutely necessary for the research study, it should be tapped from the respondent with high sensitivity, with specific reasons given. Another guideline is that whatever the nature of the data collection method the self-esteem and self-respect of the respondents should never be violated. The researcher should also not force respondents to participate in the survey. If someone turns down the opportunity to participate, that individual's wishes should be respected.

Subjects participating in the survey should never be exposed to situations in which they could be subject to physical or mental harm. Lastly, there should be absolutely no misrepresentation or distortion in reporting the data collected in the study.

Kumar, Aaker and Day (1999: 264 - 265) suggest that companies that undertake legitimate research can violate the rights of the respondents if they disguise the purpose of a particular measurement, such as a free draw or a free product. If companies deceive the prospective respondent as to the true duration of the interview, this can also be construed as violating the rights of the respondent. Another violation could be invading the privacy of the respondent. If the company misrepresents the interviewee in order to gain cooperation, this is another violation of the respondents' rights. Not mentioning to the respondent that a follow-up interview will be made, or using projective tests and unobtrusive measures to circumvent the need for a respondent's consent; using hidden tape recorders to record personal interviews (or recording phone conversations without the respondent's permission); conducting simulated product tests in which the identical product is tried by the respondent except for variations in characteristics such as colour that have no influence on the quality of product or not debriefing the respondent, can be interpreted as gross violations of the rights of the respondent.

This study avoided the above practices. The researcher and fieldworkers were transparent and informed the respondents of their right to participate in the study on a voluntary basis. The respondents were not promised any compensation or reward for participating in this study.



Finally, the respondents were also not deceived about the true duration of the time that it would take to complete the questionnaire.

Ethical behaviour on the part of respondents requires that, having exercised the choice to participate in the study, they should cooperate fully in the tasks ahead, such as responding to a survey or taking part in an experiment. Furthermore, the respondent also has an obligation to be truthful and honest in their responses. Misrepresentation, or providing information knowing that it is untrue, should be avoided (Cavana et al, 2002: 166).

The researcher is confident that all the information provided in the questionnaires by the respondents was given in an honest and truthful manner. Although some respondents did not complete the questionnaire, overall, the response rates were quite high for staff (73%) 100% for students.

#### **4.10 Population**

Hair et al (2008: 129) define a population as an identifiable group of elements (for example, people; products; and organizations) of interest to the researcher and pertinent to the research problem. A defined target population consists of the complete group of elements (people or objects) that are identified for investigation based on the objectives of the research project.

The target population for the purposes of this study were staff and students at UKZN during the year 2010.

According to UKZN's Strategic Plan 2007-2016 and the UKZN website there were about 40 000 students registered at the five campuses, which represents population one in this study.

For population two in this study the total staff complement, both academic and non-academic, permanent and contract is 4 170 (UKZN, 2007). According to the UKZN Human Resources Division, the total full time and part time academic staff was 1 494 and total support and administrative staff was 2 676, (UKZN, 2010).

Due to time and cost factors only staff and students at UKZN were selected to be part of the survey. Other entities based at the University such as service providers, contractors, etc. were excluded.

#### **4.11 Sampling and sampling method**

Bless and Smith (2000: 83) define sampling as a technical accounting device to rationalize the collection of information, to choose the restricted set of objectives, persons, events and so forth from which the actual information will be drawn in an appropriate way.

Kumar et al (2002: 301) indicate that major activities associated with the sampling process are identifying the target population; determining the sample frame; resolving the differences; selecting a sample procedure; determining the relevant sample size; obtaining information from the respondents; dealing with non-responses; and generating the information for decision-making process.

According to Cooper and Schindler (2006: 402 - 403) the basic idea of sampling is selecting some of the elements in a population, from which the researcher may draw conclusions about the entire population. There are several compelling reasons for sampling. It lowers costs; it produces more accurate results; and it contributes to the increased speed of data collection.

##### **4.11.1 Sampling design**

Non-probability sampling procedures were used by the researcher as they met the sampling objectives satisfactorily. Additional reasons for choosing non-probability over probability sampling are the cost and time issues. With non-probability sampling the questionnaires were given to any staff or students willing to complete them. Welman et al (2005: 68) reiterates the advantages of non-probability samples in that they are less complicated and more economical in terms of time and financial costs than probability samples.

Convenience sampling approach formed part of the non-probability sampling employed in this study. This provided the researcher and fieldworkers with the freedom to choose whoever they could find to voluntarily participate in the study.

Iacobucci and Churchill (2010: 286) list examples of convenience samples. An example of convenience sampling is when we speak to friends and on the basis of their reactions we infer the political sentiment of the country. Another example is when a local radio station asks people to call in to express their reactions to some issue and the opinions expressed are interpreted as prevailing sentiment. Lastly, calling for volunteers and using those that come forward in a study, is an example of convenience sampling.

In this study, with respect to staff respondents, the researcher and fieldworkers went from office to office and asked both academic and support staff at the University if they would like to participate in the survey. The survey was conducted on all five UKZN campuses. Since issuing the questionnaire to staff proved difficult, staff was also telephoned; if they agreed to participate in the survey, the questionnaire was then e-mailed or posted to them.

For the student respondents, the researcher visited lecture halls after gaining the permission of the respective lecturers and conducted the survey. To reach more students, the researcher employed fieldworkers to distribute the self-administered questionnaires to students who frequented the library; computer LANs; cafeterias; and student residences on the five campuses. According to Cooper and Schindler (2006: 252), while a convenience sample has no control to ensure precision, it can be a useful procedure. Researchers often take a sample to test ideas or even to gain ideas about a subject of interest. A researcher might use this approach in the early stages of exploratory research. The results may present evidence that is so overwhelming that a more sophisticated sampling procedure would be unnecessary.

Zikmund (2000: 351) also illustrates that researchers use convenience samples to administer a large number of questionnaires quickly and economically. The user of research that is based on a convenience sample should remember that projecting the results beyond the specific sample is inappropriate.

For this study, convenience sampling was used to administer a large number of questionnaires quickly and economically. Generalizations will not be made to other universities, as the results are specific to UKZN staff and students.

#### **4.11.2 Sample size**

Welman et al (2005: 70 - 71) illustrate that the sample size is often governed by the following important issues. Firstly, the researcher needs to have confidence in the data i.e. the researcher needs to have a high level of certainty that the characteristics of the data collected would represent the characteristics of the total population. Secondly, the margin of error that can be tolerated should be understood. Here, the accuracy the researcher requires for any estimates made for the sample should be taken into account. The types of analyses the researcher is going to undertake, in particular the number of categories into which the researcher wishes to subdivide the data, or the use of statistical techniques, have an impact on sample size. Thirdly, the size of the total population from which the sample is drawn plays a crucial role in the sample size.

For this study, the researcher chose two sample categories from UKZN, namely, staff and students. The study used Krejcie and Morgan's tables (1970) on sample size for a given population to choose the sample size. Sample One included 380 students from the Westville; Howard College; Edgewood; Nelson R. Mandela School of Medicine; and Pietermaritzburg campuses. According to the UKZN's Strategic Plan, (2007:4), there are 40 000 students spread across the five campuses. According to Cavana et al (2002: 278), Krejcie and Morgan's tables indicate that for a population of 40 000, the sample size would be 380. All 380 (100%) questionnaires for the student sample were returned completed. This was an excellent sample response rate.

Sample Two included 354 academic and non-academic staff from the Westville, Howard College, Edgewood, Nelson R. Mandela and Pietermaritzburg campuses. This figure was also arrived at using Krejcie and Morgan's tables. According to Cavana et al (2002: 278), Krejcie and Morgan's tables indicate that for a population of 4 170, the sample size would be 354. A total of 290 (82%) questionnaires were collected. Thirty one questionnaires from staff (9%) were spoilt and could not be included in the survey. The remaining 259 (73%) of questionnaires completed by staff were included in the survey. The response rate of 73% for the staff survey is considered sufficient in social science terms.

## **4.12 Validity and Reliability of the Data Collection Method**

### **4.12.1 Validity**

Cooper and Schindler (2006: 318) define validity as the extent to which a test measures what is actually intended to measure. Saunders, Lewis and Thornhill (2003: 101) define validity as the extent to which the data collection method and/or related methodologies accurately measure what they are intended to measure, as well as the extent to which the research findings are really about what they profess to be about. According to Cooper et al (2006:318) content validity of a measuring instrument refers to the extent to which it provides adequate coverage of the investigative questions guiding the study.

According to Cooper and Schindler (2006: 318) content validity of a measuring instrument refers to the extent to which it provides adequate coverage of the investigative questions guiding the study. For this investigation, the measuring instrument used in the questionnaire design was Parasuramen, Berry & Zeithmal's (1984) SERVQUAL instrument that was refined to fit the

dimensions of the tertiary education environment. The research variables were drawn from the literature reviewed on service quality, with specific emphasis on tertiary institutions and their related services. The questionnaire was reviewed by peers from UKZN who are experts in research methodology, senior academics, and a professional statistician. Based on their feedback, a few questions were re-phased. In this respect, the design of the questionnaire enjoyed high content validity, and a pilot study was conducted to ensure that the instrument measured what it intended to measure.

A pilot study was conducted in January 2010 utilizing the revised questionnaires on 40 students and 20 staff on the five UKZN campuses. Pre-testing of this small group of staff and student respondents was undertaken to test the appropriateness of the questions and the respondents' comprehension of the questions.

Sekaran and Bougie (2010: 210) indicate that it is important to pre-test the instrument to ensure that the questions are understood by the respondents (i.e. there is no ambiguity) and that there are no problems with the wording or measurement. The pre-testing of the questionnaire on a small group of staff and students at UKZN elicited the following comments from respondents:

1. The time allocated to complete the questionnaire was adequate.
2. The language of the questionnaire was understood by most of the respondents.
3. Some respondents argued that the questionnaire was too long.

While very few shortcomings were identified in the original questionnaire during the pilot study, those that were identified were subsequently corrected. The pilot study was conducted to determine the feasibility of the study and the appropriateness of the questionnaires in collecting data from both the staff and student populations. Zikmund (2000: 214) emphasizes that pre-testing a questionnaire on a small sample of respondents is a useful way to discover problems while they still can be corrected.

#### **4.12.2 Reliability**

Zikmund (2000: 280) broadly defines reliability as the degree to which measures are free from error and therefore yield consistent results. Cooper et al (2006: 321) indicate that reliability is concerned with estimates of the degree to which a measurement is free of random or unstable error.

Reliability instruments can be used to ensure that transient and situational factors are not interfering. For this study, the Cronbach's Co-efficient Alpha was used to measure reliability.

According to Litwain (1995: 31) a reliability coefficient of less than 0.5 is considered unacceptable. If the measure falls between 0.5-0.6, it is regarded as significant, and if it is above 0.7, it is regarded as good.

The Cronbach's Alpha for Overall Staff and Student Expectations respectively was 0.975 representing a good significant level of internal reliability of the measuring instrument.

The Cronbach's Alpha for overall staff perceptions was 0.981 and the overall students' perceptions were 0.974 representing a good significant level of internal reliability of the measuring instrument.

#### **4.13 Data analysis**

The data analysis techniques used were descriptive statistics and inferential statistics. After being analysed data will be listed in frequency tables, bar charts or pie charts and cross-tabulations.

##### **4.13.1 Descriptive statistics**

According to Landman (1988: 59) descriptive statistics are primarily concerned with the nature and degree of existing situations or conditions. The purpose is to describe rather than to judge or interpret. Zikmund (2000: 367) adds that descriptive statistics are statistics used to describe or summarize information about a population sample. Struwig and Stead (2001: 158) suggest that descriptive statistics provide statistical summaries of data. The purpose of these statistics is to provide an overall, coherent and straightforward picture of a large amount of data.

The following descriptive statistics were used in the study:

###### **4.13.1.1 Frequencies and percentages**

For this study data will be presented using frequency tables and in percentages.

Cooper and Schindler (2006: 473) point out that frequency tables are a simple device for arraying data. Cooper and Schindler (2006: 484) also add that percentages serve two purposes in data presentation. Firstly, they simplify the data by reducing all numbers to a range from 0-100. Second, they translate the data into a standard form with a base of 100 for relative comparisons.

#### **4.13.1.2 Measures of Central Tendencies**

Three measures of central tendencies, the Mean, Median and Mode, are used in this study.

##### **4.13.1.2 (a) The Mean**

Zikmund (2000: 369) indicates that the mean is an average of a set of outcomes. The mean is simply the arithmetic average, and is a very common measure of central tendency.

Sekaran and Bougie (2010: 316) interpret the mean as a measure of central tendency that offers a general picture of the data without unnecessarily inundating one with each of the observations in a data set.

Hair et al (2008: 246) strongly argue that the mean is a very robust measure of central tendency. It is fairly insensitive to data values being added or deleted. The mean can be subject to distortion if extreme values are included in the distribution.

##### **4.13.1.2 (b) The Median**

Sekaran and Bougie (2010: 316) define the median as the central item in a group of observations when they are arrayed in either ascending or descending order. Hair et al (2008: 247) add that if the number of data observations is even, the median is generally considered to be the average of the two middle values. If there are an odd number of observations, the median is the middle value. The median is especially useful as a measure of central tendency for ordinal data and for data that is skewed to either the right or left.

##### **4.13.1.2 (c) The Mode**

According to Hair et al (2008: 247) the mode is the value that appears in the distribution most often. The mode is the value that represents the highest peak in the distribution graph. The mode is especially useful as a measure for data that have been somehow grouped into categories.

For the purposes of this study the Mean will be used.

#### **4.13.1.3 Measures of Dispersion**

Three measures of dispersion are the Range, Standard deviation and Variance.

#### **4.13.1.3 (a) The Range**

Cooper et al (2006: 716) define the range as the difference between the largest and smallest scores in the data distribution. It is a very rough measure of spread of dispersion.

Hair et al (2008: 247) add that the range defines the spread of the data. It is the distance between the smallest and the largest values of the variable. Another way to think about it is that the range identifies the endpoints of the distribution of values.

#### **4.13.1.3 (b) The Standard Deviation**

Sekaran and Bougie (2010: 318) explain that the standard deviation, which is another measure of dispersion for interval and ratio scaled data, offers an index of the spread of a distribution or variability in the data. It is a very commonly used measure of dispersion, and is simply the square root of the variance.

Hair et al (2008: 247) suggest that since the estimated standard deviation is the square root of the average squared deviations, it represents the average distance of the values in a distribution from the mean. If the estimated standard deviation is large, the responses in the distribution numbers do not fall very close to the mean of the distribution. If the estimated standard deviation is small, the distribution values are close to the mean. Another way to view the estimated standard deviation is by its size, giving meaning to the level of agreement amongst the respondents when they answered a particular question.

#### **4.13.1.3 (c) The Variance**

Cooper and Schindler (2006: 720) states that the variance is a measure of score dispersion about the mean; calculated as the squared deviation scores from the data distribution mean; the greater the dispersion of scores, the greater the variance in the data set.

For the purposes of this study the standard deviation will be used to measure variation of the responses of the subjects.

#### **4.13.2 Inferential statistics**

Welman et al (2009: 236) emphasize that, broadly speaking, inferential statistics are concerned with inferences that we can make about population indices on the basis of the corresponding



indices obtained from samples drawn randomly from populations. Zikmund (2000: 367) adds that inferential statistics makes an inference about a population from a sample.

#### **4.13.2.1 Non-parametric statistics**

Struwig and Stead (2001: 165) propose using non-parametric statistics if:

- the sample size is too small;
- when the variances of the scores for each group are statistically significantly different from each other (i.e. there is heterogeneity of variance); and
- when the distribution scores are excessively asymmetrical (e.g. very skewed).

To ascertain whether the parametric or non-parametric tests should be used in this study, a Normality test was conducted. The One-Sample Kolmogorov Smirnov test was used and it showed that all the data, with the exception of assurance perceptions, did not follow a normal distribution. Hence non-parametric tests were conducted. The following non-parametric tests were employed in the study: Mann Whitney U test; Kruskal-Wallis test; and Spearman Correlation. A brief discussion on these non-parametric tests appears below.

##### **4.13.2.1 (a) Mann-Whitney test**

The Mann-Whitney (or ranked sum) test allows for testing group differences when the populations are not normally distributed, or when it cannot be assumed that the samples are from populations that are equal in variability. It is an alternative to the *t*-test for two independent samples (Zikmund, 2000: 501).

##### **4.13.2.1 (b) Kruskal-Wallis test**

According to Zikmund (2000: 502), when there is a need to compare three or more groups or populations and the data are ordinal, the Kruskal–Wallis test is the appropriate statistical technique. The test may be thought of as a nonparametric equivalent of analysis of variance. However, as with all nonparametric tests, the assumptions are less restricting. The researcher does not have to assume that the populations are normally distributed or that equal variances are shared by each group. If there are three groups, the null hypothesis is that Population 1 equals Population 2, which equals Population 3. In other words the Kruskal-Wallis test is a technique to determine if the three populations have the same distribution, shape and dispersion.

#### **4.13.2.1 (c) Spearman rank order correlation**

According to Zikmund (2000: 529), Spearman rank order correlation is a nonparametric correlation technique that a researcher can utilize as a substitute for the Pearson correlation technique. This statistical technique is used to determine the agreement or correlation between the two groups.

#### **4.14 Summary**

The chapter provided a brief overview of the research methodology used during the empirical survey. The problem and sub-problems and hypotheses to be tested were also stated. The research method; data collection instrument; questionnaire design; the pilot study; and population, sample and sampling method were also discussed. The various statistical techniques used to analyze the data were also presented and discussed.

The following chapter discusses the data analysis and presents the results of the research study.

## CHAPTER FIVE

### PRESENTATION AND ANALYSES OF RESULTS

#### 5.1 Introduction

This chapter sets out the results obtained from the study. The results are presented using descriptive and inferential statistics. The data for the study were obtained by analysing the respondents' responses to the questionnaires that were administered to staff and students at UKZN. The Statistical Package for the Social Sciences (SPSS) version 13 for Windows programme was used for the analyses and presentation of the data. The study set the tolerance level of error, referred to as the "p value", at 5% (0.05). It is important to note that this level of error represents the acceptable significant difference between the expected and actual population parameter values.

For this study the target population was 4 170 staff and 40 000 students at UKZN's five campuses namely, Westville; Howard College; Edgewood; Nelson R. Mandela School of Medicine; and Pietermaritzburg. Using Krejcie and Morgan's tables on population and sample size, a sample of 380 students and 354 staff from Westville, Howard College, Edgewood, Nelson R. Mandela School of Medicine and Pietermaritzburg campuses was selected for this study. A total of 380 fully completed student questionnaires were returned, representing a 100% response rate, which was considered excellent and more than adequate to draw meaningful conclusions about the student target population. For staff a total of 259 fully completed questionnaires were returned, representing a 73% response rate, which was considered more than adequate to draw meaningful conclusions about the staff target population.

The data accessed for this study were both ordinal and nominal in form. Two types of analysis were conducted on the data collected. The first part of the discussion will highlight the demographical variables in this study. Descriptive statistics in the form of bar charts and pie charts will be used. The second part of results will focus on the inferential statistics. The perceptions, expectations and relevant gap scores with respect to the quality variables (tangibles; responsiveness; reliability; assurance; and empathy) for students and staff, respectively will be presented and addressed accordingly. This will be done using appropriate statistical tests on the data emanating from this study. Rigorous analysis and interpretation of these results will be presented in order to identify important patterns and relationships that may exist.

## 5.2 Descriptive statistics

The results of the study are based on the descriptive statistics of the staff and student profiles in the form of bar charts and pie charts.

### 5.2.1 Profile of the samples

The study comprises two sample groups, namely, one for staff and the other for students.

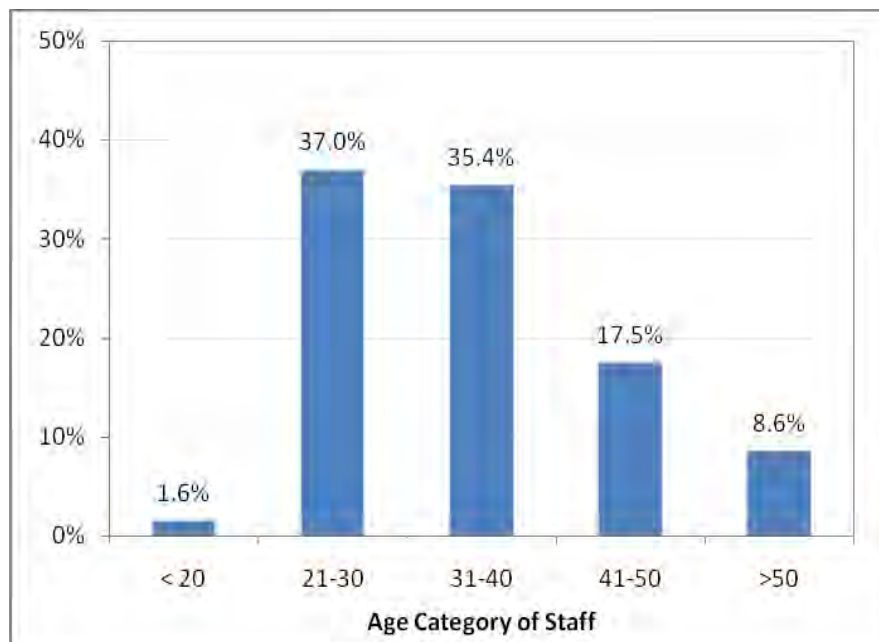
#### 5.2.1.1 Profile of staff sample

The graphs set out in the pages that follow refer to the demographic information pertaining to the staff respondents at UKZN.

Tables included in Appendix E contain the actual count of staff respondents in each demographic area.

##### a) Age

The age groups of the staff respondents are shown in Figure 5.1.



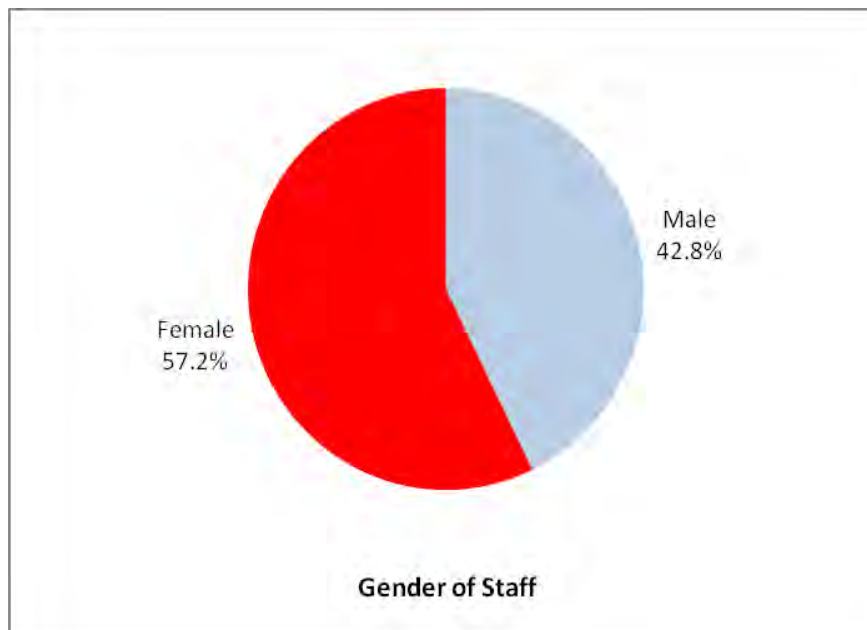
**Figure 5.1: Age of staff respondents**

The majority of staff respondents (37%) were in the age category 21-30 years. This was followed by respondents in the age categories 31- 40 years (35.4%), 41- 50 years (17.5%), more than 50 years (8.6%) and <20 years (1.6%).

This shows that majority of the sample group fall between the ages of 21- 40 years (72.4%). The remaining 25.1% are between 41 years and > 50years, followed by 1.6% that fall in the category of < 20 years.

## b) Gender

The gender of staff respondents is shown in Figure 5.2.

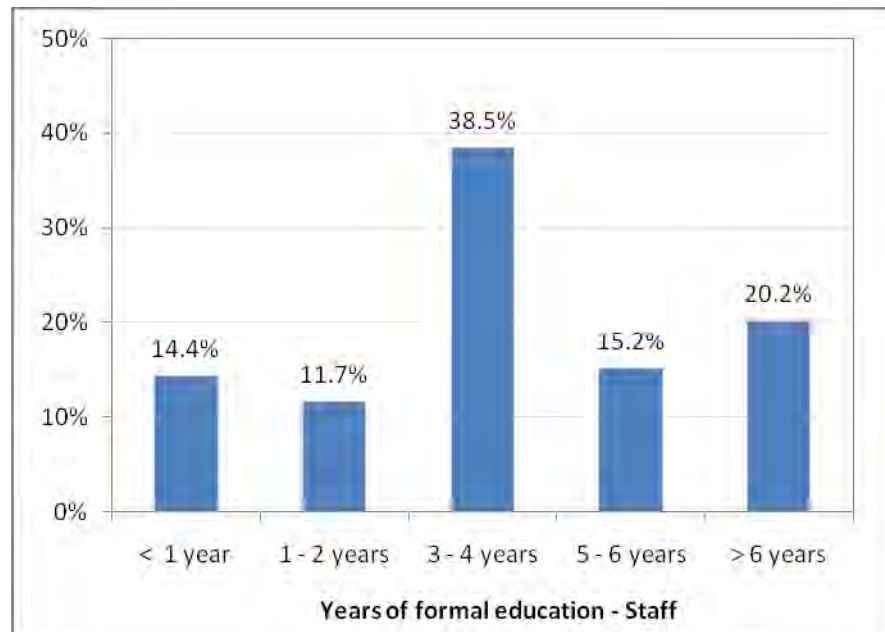


**Figure 5.2: Gender of staff respondents**

Figure 5.2 indicates that more women (57.2%) participated in the staff survey than men (42.8%).

### c) Years of Formal Education

The years of formal education of staff respondents are shown in Figure 5.3.



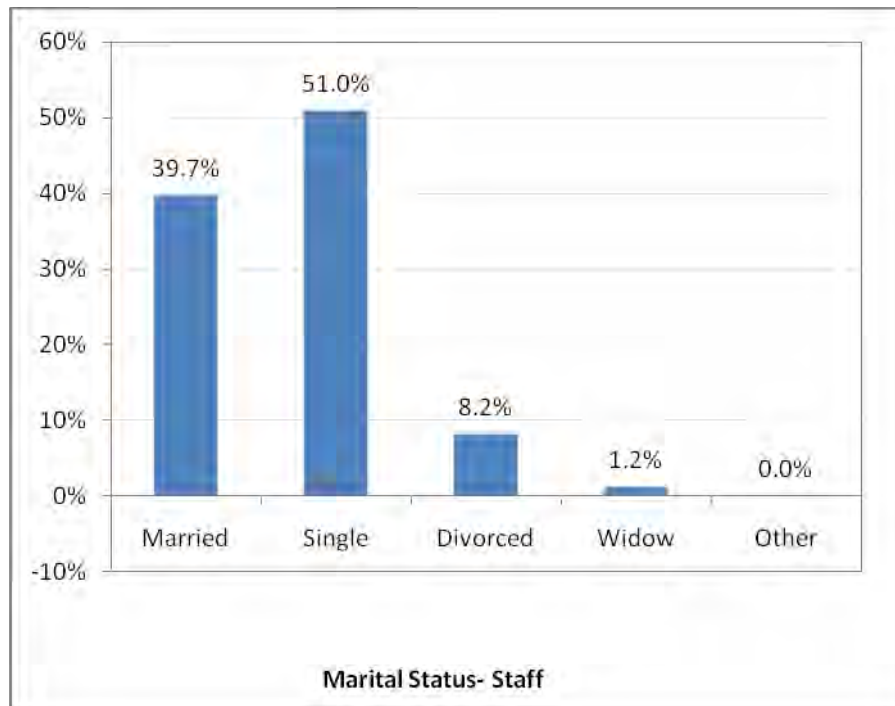
**Figure 5.3 : Years of formal education of staff respondents**

The years of formal education refers to post-matric formal education. Thirty eight percent of staff respondents had 3 - 4 years formal education, followed by 20.2% with more than six years, 15.2% with 5 - 6 years, 14.4% with less than a year and 11.7% with 1 - 2 years formal education.

The majority of the staff respondents (73.9%) had between 3 years and > 6 years formal education. Of the remaining staff respondents, 26.1% have between < 1 year and 2 years formal education.

#### d) Marital status

The marital status of the staff respondents is shown in Figure 5.4.



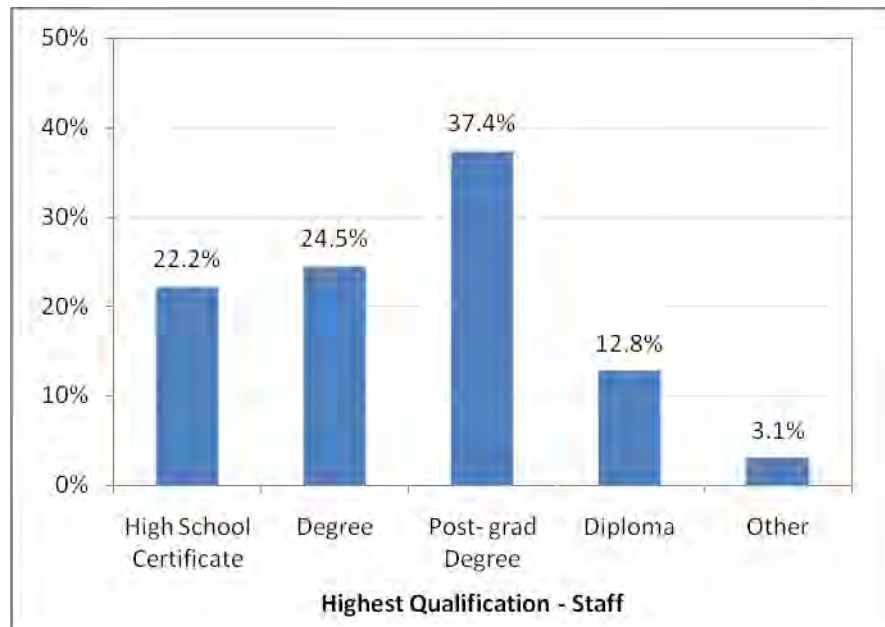
**Figure 5.4: Marital status of staff respondents**

Figure 5.4 indicates that the majority (51%) of staff respondents were single, followed by 39.7% who were married and 8.2% who were divorced; the remaining 1.2% was widowed.

The majority of the staff respondents (90.7%) were either married or single, whilst the remaining 9.3% were either divorced or widowed.

### e) Highest Qualification

The highest qualifications of the staff respondents are shown in Figure 5.5.



**Figure 5.5: Highest qualification of staff respondents**

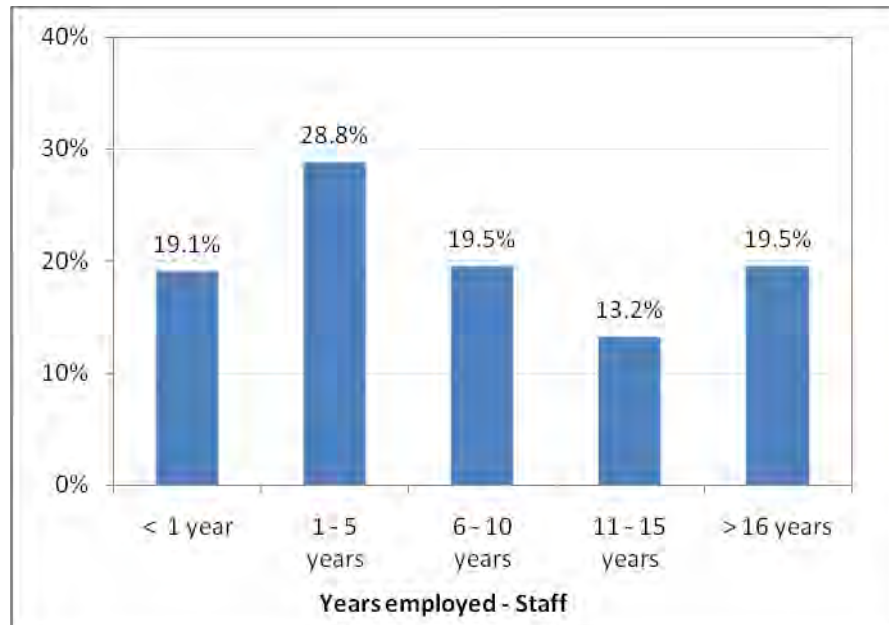
The majority of the staff respondents (37.4%) had a post-graduate qualification, followed by 24.5% who had a degree, 22.2% with a high school certificate, 12.8% with diplomas and 3.1% with other qualifications.

The majority of staff respondents (77.8%) have some form of post matric qualification, namely, a certificate course, diploma, degree or postgraduate degree. The remaining 22.2 % of staff respondents have only a high school certificate.



**f) Years staff employed**

The number of years staff respondents had been employed is shown in Figure 5.6.



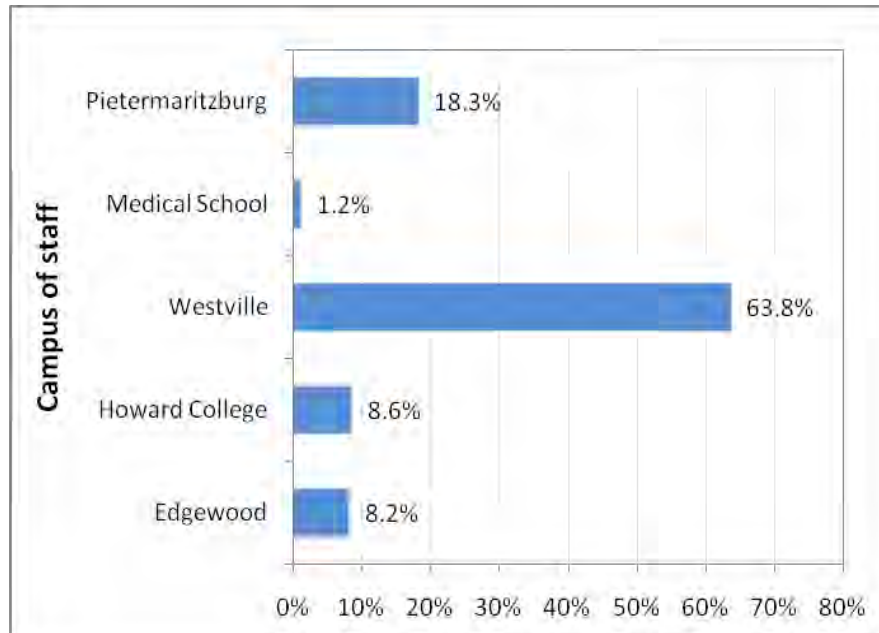
**Figure 5.6: Years staff employed**

Figure 5.6 illustrates that most of the staff respondents (28.8%) had been employed between 1 and 5 years, followed by 19.5% who had been employed between 6 and 10 years, 19.5% who had been employed for more than 16 years, 19.1% who had been employed for less than a year, and remaining 13.2% who had been employed for between 11 and 15 years.

The highest number of staff respondents (80.5%) had been employed between < 1 year and 15 years. The remaining 19.5% of staff respondents had been employed >16 years.

**g) Campus where staff are situated**

Figure 5.7 indicates the campus where staff respondents are situated.

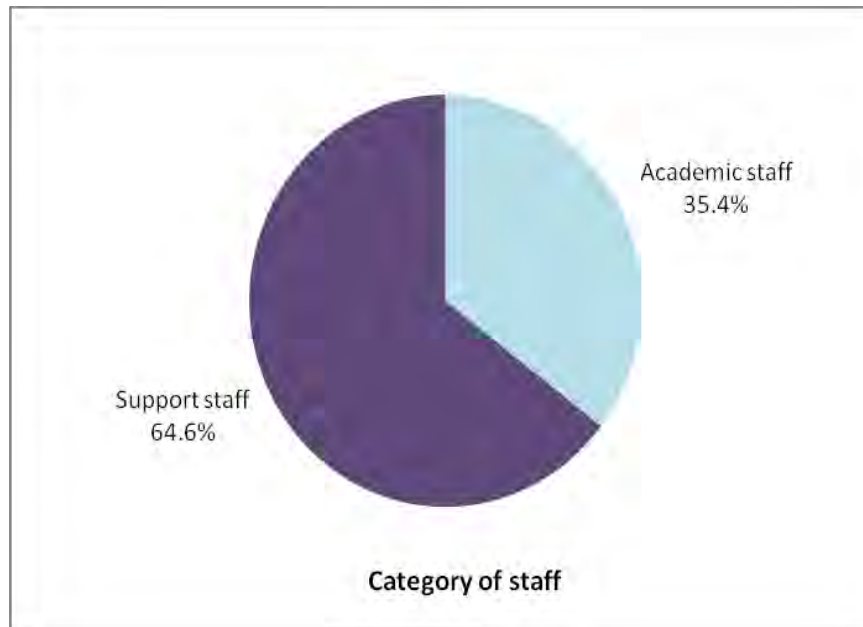


**Figure5.7: Campus where staff are situated**

The majority of the staff respondents (63.8%) worked at the Westville campus, followed by 18.3% at the Pietermaritzburg campus, 8.6% at the Howard College campus and 8.2% at the Edgewood campus. The remaining 1.2% of the staff respondents worked at the Nelson R. Mandela School of Medicine campus.

#### **h) Category of staff respondents**

The categories of staff respondents are depicted in Figure 5.8.

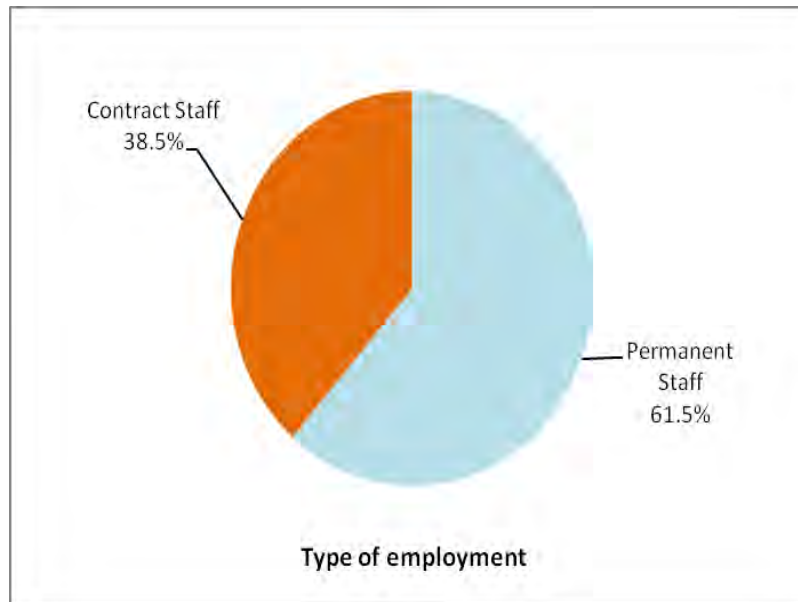


**Figure 5.8: Category of staff respondents**

Figure 5.8 illustrates that the majority of the staff respondents (64.6%) were support staff, whilst the remaining 35.4% comprised of academic staff.

**i) Type of employment**

Figure 5.9 indicates whether the respondents were employed on contract or were permanent staff.

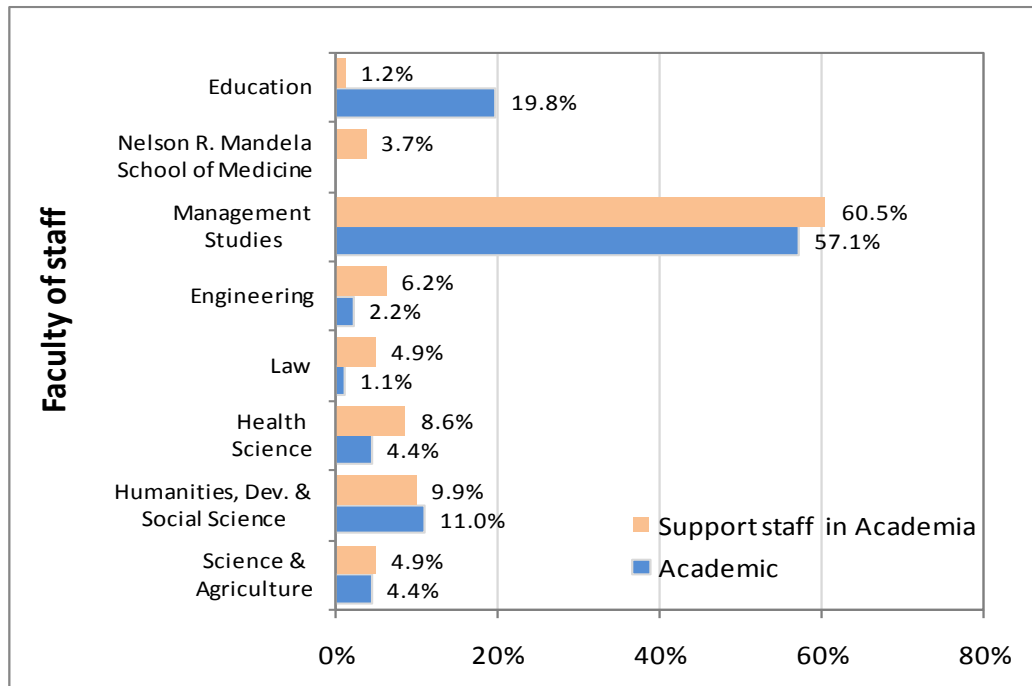


**Figure 5.9: Type of employment**

The majority of the staff respondents (61.5%) were permanent staff whilst the remaining 38.5% were on contract.

**j) Faculty within which academic and academic support staff are employed**

Figure 5.10 depicts the faculty within which academic and support staff respondents are employed.



**Figure 5.10: Faculty within which academic and academic support staff respondents are employed**

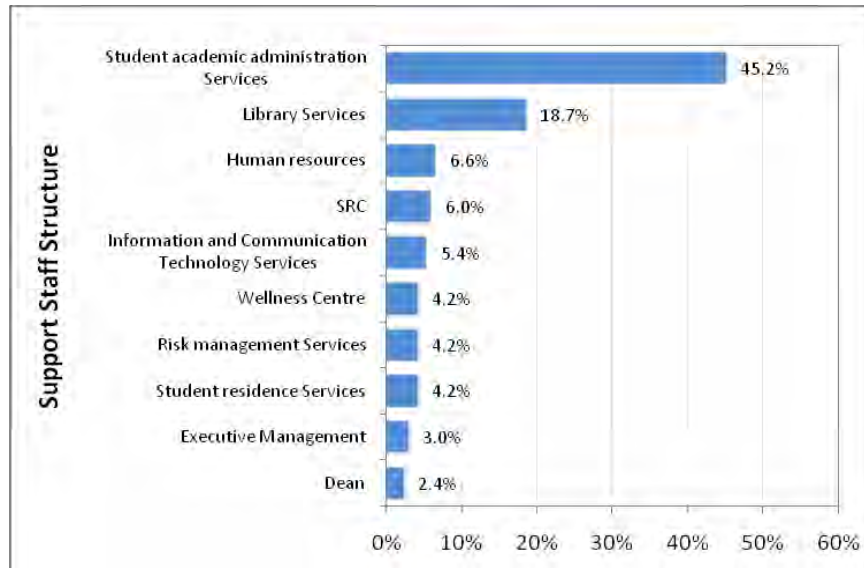
The total staff who participated in the survey was 257. The total academic staff was 91. The total support staff was 166, of which 81 were academic support staff.

The highest number of academic staff respondents (57.1%) worked in the Faculty of Management Studies; followed by 19.8% in the Faculty of Education; 11.0% in the Faculty of Humanities; Development and Social Sciences; 4.4% in the Faculty of Science and Agriculture; 4.4% in the Faculty of Health Sciences; 2.2% in the Faculty of Engineering; and the remaining 1.1% in the Faculty of Law.

The majority of the academic support staff respondents (60.5%) worked within the Faculty of Management Studies; followed by 9.9% in the Faculty of Humanities; Development and Social Sciences; 8.6% in the Faculty of Health Sciences; 6.2% in the Faculty of Engineering; 4.9% in the Faculty of Law; 4.9% in the Faculty of Science and Agriculture; 3.7% in the Nelson R. Mandela School of Medicine; and the remaining 1.2% in the Faculty of Education.

### k) Administration and support staff structure

Figure 5.11 indicates the distribution of the administration and support staff in the University structure.



**Figure: 5. 11: Administration and support staff structure**

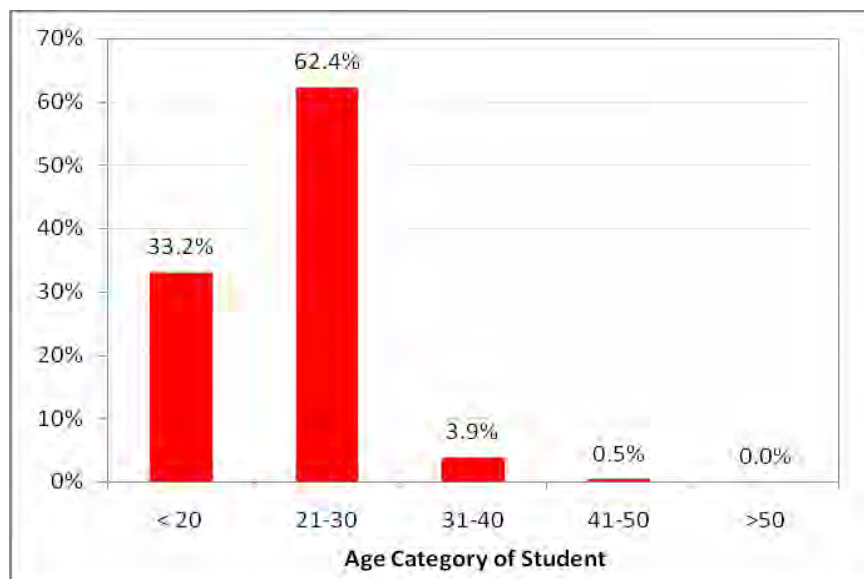
Figure 5.11 indicates that distribution of the administration and support staff within the various structures at the University were as follows: the majority (45.2%) worked within Student Academic Administrative Services, 18.7% in the Library; 6.6% in the Human Resources Department; 6% in the SRC; 5.4% in Information and Communication Technology Services; 4.2% in Student Residence Services; 4.2% in Risk Management; 4.2% at the Wellness Centres; 3% in Executive Management; and the remaining 2.4% were Deans.

### 5.2.1.2 Profile of the student sample

The graphs set out in the pages that follow refer to the demographic information pertaining to the student respondents at UKZN. Tables included in Appendix F contain the actual count of the student respondents in each demographic area.

#### a) Age

The age groups of the student respondents are shown in Figure 5.12.



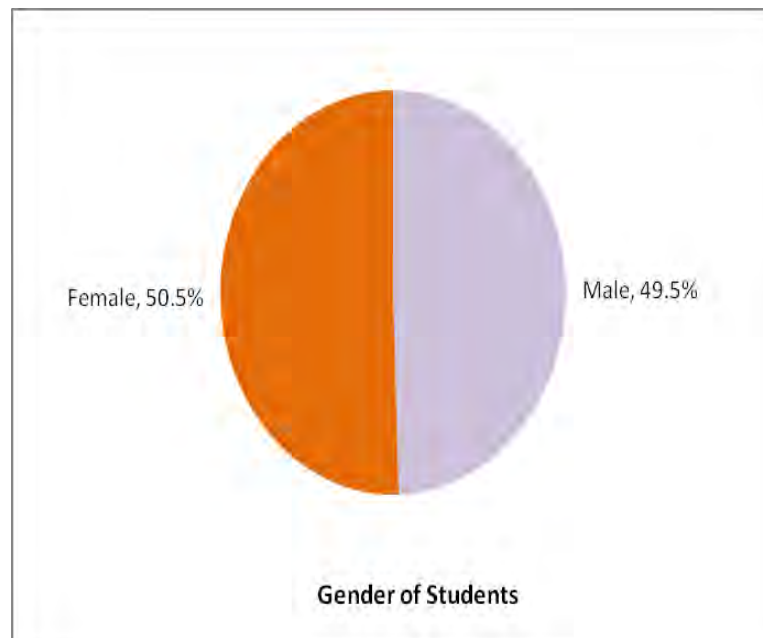
**Figure 5.12: Age of student respondents**

Figure 5.12 indicates that most of the student respondents (62.4%) were between the ages of 21 and 30 years. This was followed by 33.2% who were 20 years or younger; and 3.9% between the ages of 31 and 40; the remaining 0.5% were in the 41-50 years age category.

The majority of the student respondents (95.6%) were between the ages of < 20 to 30 years. The remaining 4.4% of student respondents were between the ages of 31 to 50 years.

**b) Gender of student respondents**

The gender of the student respondents is shown in Figure 5.13.



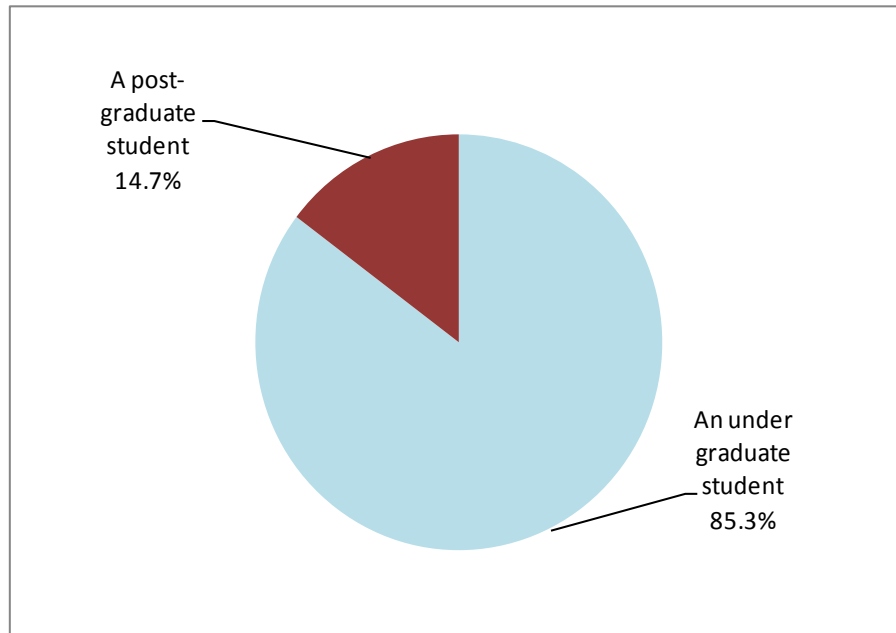
**Figure 5.13: Gender of student respondents**

The majority of student respondents (50.5%) were female; the remaining 49.5% were male.



**c) Undergraduate and postgraduate student respondents**

Figure 5.14 depicts the distribution of undergraduate and postgraduate student respondents.

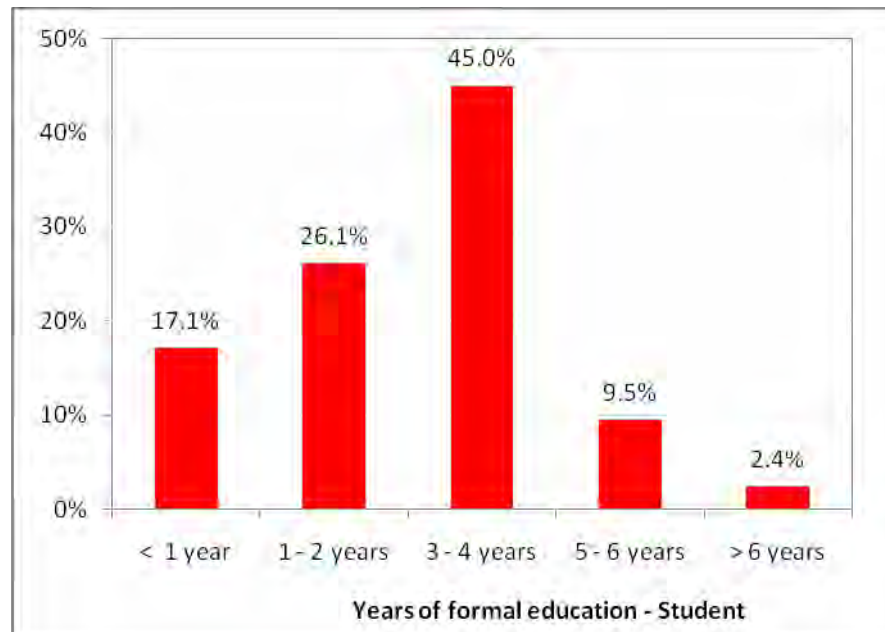


**Figure 5.14: Undergraduate and post-graduate student respondents**

Figure 5.14 illustrates that the majority of the student respondents were undergraduate students (85.3%), while 14.7% were postgraduate students.

**d) Student respondents' years of formal education**

Student respondents' years of formal education (post-matric) are shown in Figure 5.15.

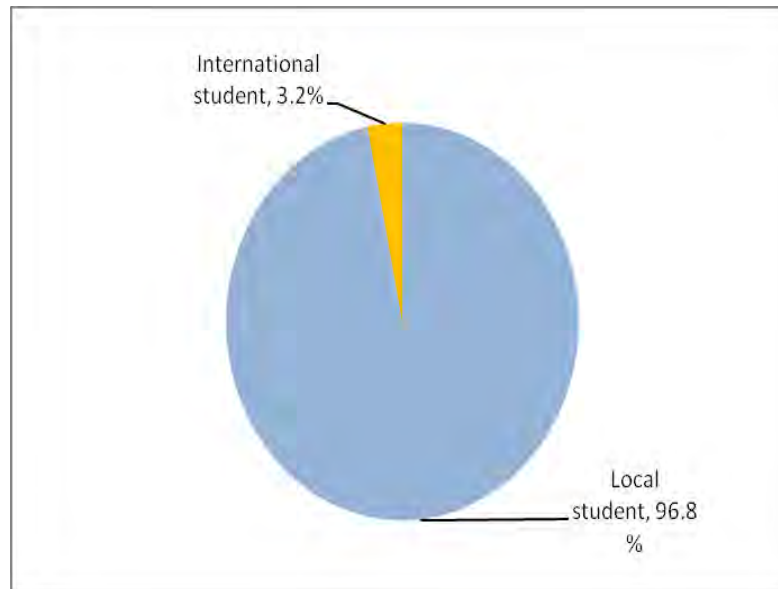


**Figure 5.15: Student respondents' years of formal education**

The majority of the student respondents (45.0%) had 3 - 4 years of formal education; followed by 26.1% who had 1 - 2 years of formal education; 17.1% who had less than one year formal education; 9.5% who had 5 - 6 years of formal education; and lastly 2.4 % had more than 6 years formal education.

**e) Local and international student respondents**

The distribution of local and international student respondents is shown in Figure 5.13.

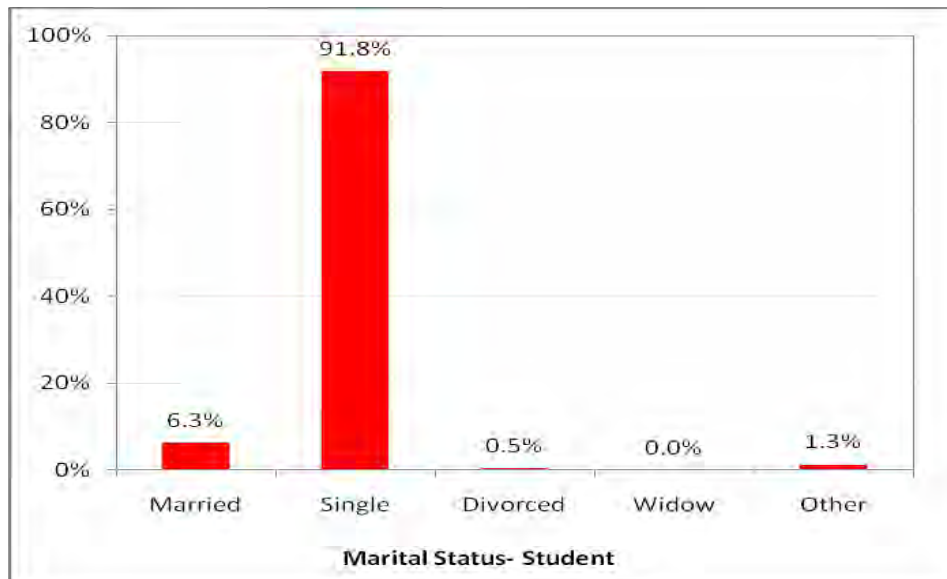


**Figure 5.16: Local and international student respondents**

Figure 5.16 indicates that the majority of the student respondents (96.8%) were local students while the remaining 3.2% were international students.

**f) Marital status of students**

The marital status of student respondents is shown in Figure 5.17.



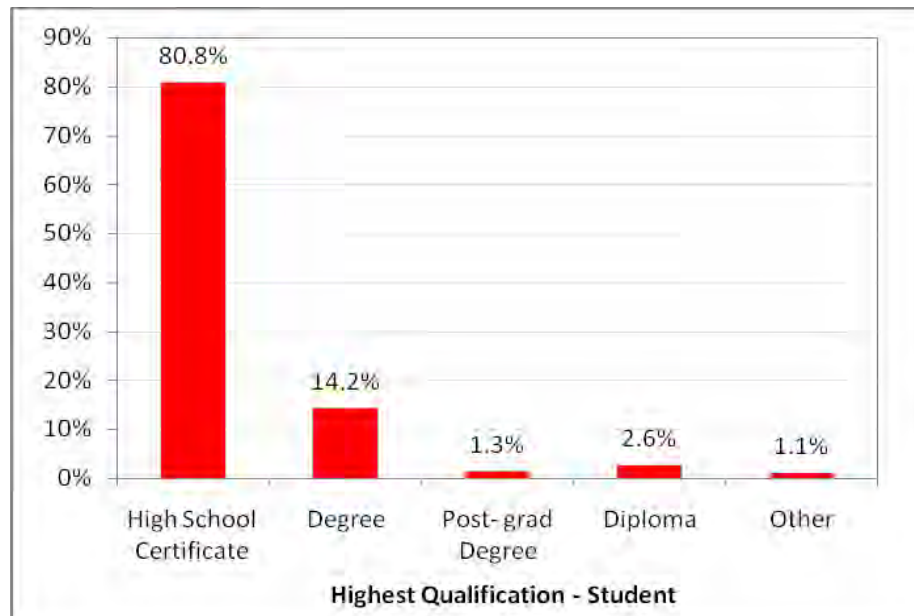
**Figure 5.17: Marital status of students**

The majority of the student respondents (91.8%) were single; followed by 6.3% who were married; 1.3 % that fell into the “other” category (which could refer to them being engaged or living with a partner); and the remaining 0.5% were divorced.

Most of the student respondents (98.2%) were single or married and the remaining 1.8% was either divorced or “other” (either engaged or living with a partner).

### g) Highest qualification of student respondents

The highest qualification of student respondents is shown in Figure 5.18.

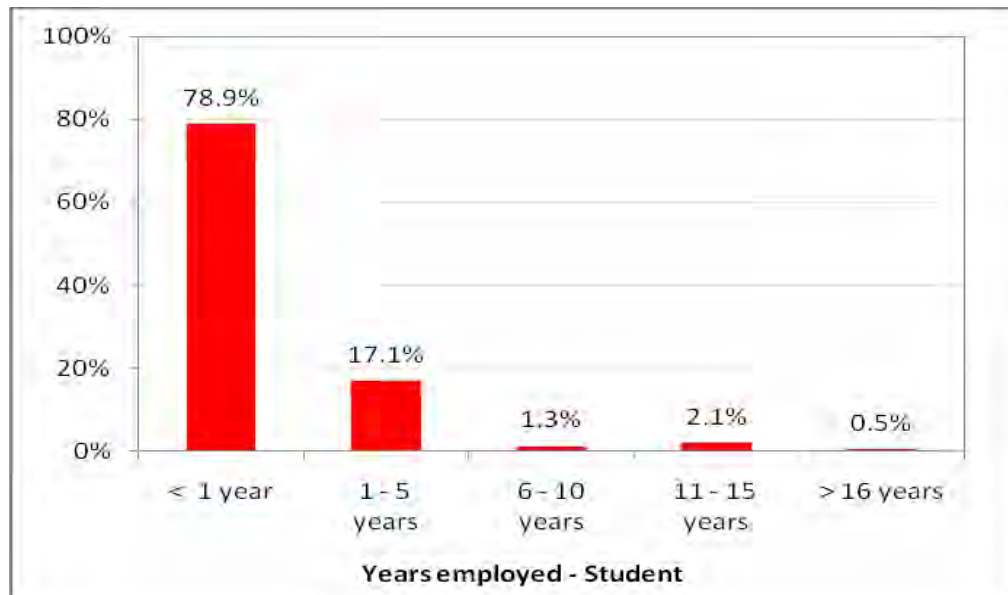


**Figure: 5.18 Highest qualifications of student respondents**

Figure 5.18 illustrates that the highest qualification achieved by the majority of the student respondents (80.8%) was high school certificates; followed by 14.2% who had a degree; 2.6% with diplomas; 1.3% with a post-graduate degree (namely; honours, masters or PhD); and the remaining 1.1% had other qualifications (certificate courses).

### g) Years of employment of student respondents

Figure 5.19 depicts years of employment of student respondents.



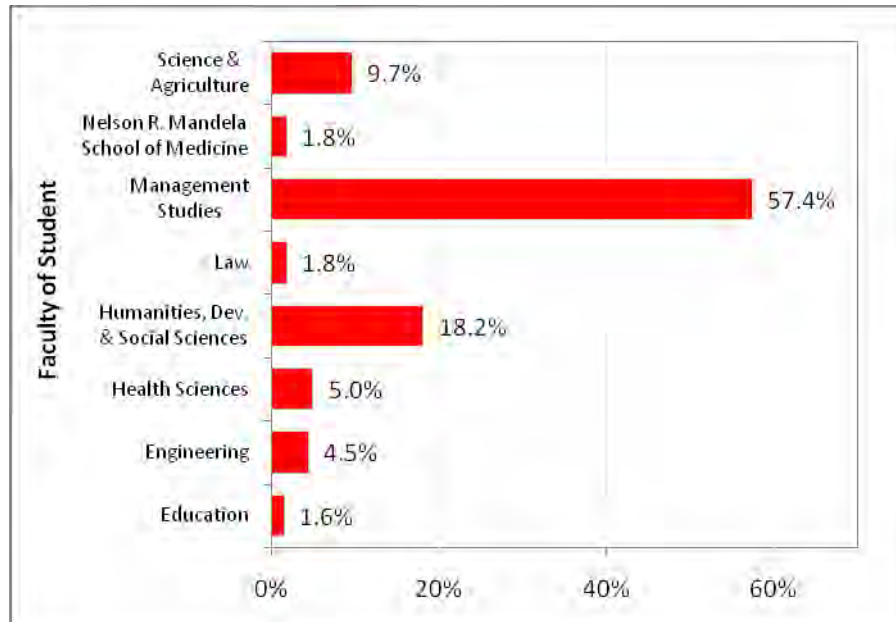
**Figure 5.19: Years of employment of student respondents**

The majority of student respondents (78.9%) had had casual jobs for < 1 year; followed by 17.1% who had worked between 1 and 5 years; 2.1% who had worked between 11 and 15 years; 1.3% who had worked between 6 and 10 years; and 0.5% who had worked for more than 15 years.

The researcher did not classify casual, part-time or full-time employment beyond one year, since students may have worked to save the money to come to university. Some had part-time jobs to help them while studying and others worked full time and studied. Students also did a combination of casual, part-time or full-time jobs. This made it difficult to place them in a category. It was easier to place students by the number of years they worked.

## h) Faculty in which student respondents are studying

Figure 5.20 depicts the faculty within which student respondents were studying.

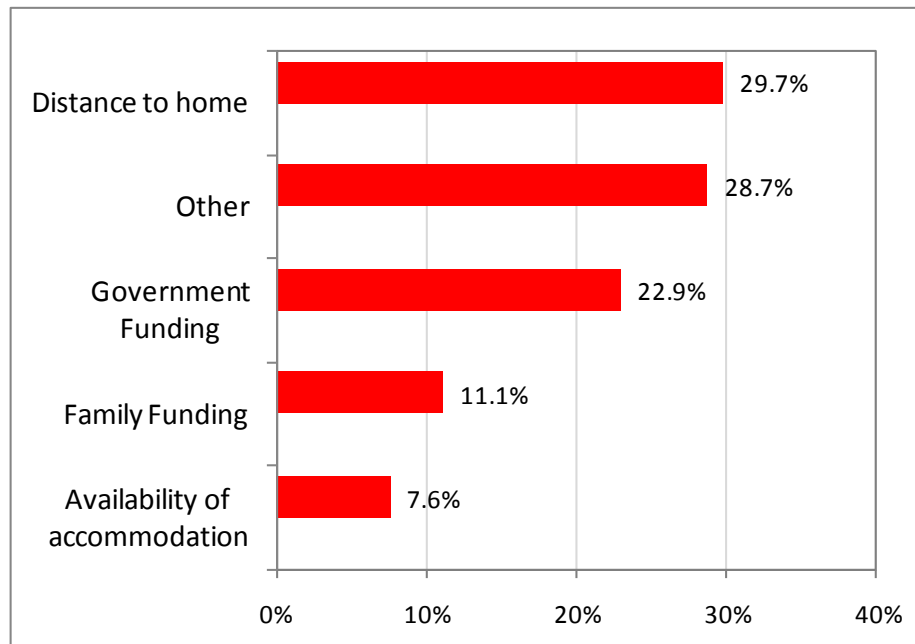


**Figure 5.20: Student respondents by faculty**

Figure 5.20 shows that most of the student respondents (57.4%) were studying in the Faculty of Management Studies; followed by 18.2% in the Faculty of Humanities, Development and Social Sciences; 9.7% in the Faculty of Science and Agriculture; 5% in the Faculty of Health Sciences; 4.5% in the Engineering Faculty; 1.8% in the Law Faculty; 1.8% in the Nelson R. Mandela School of Medicine; and lastly 1.6% in the Faculty of Education.

**i) Factors that impacted on student respondents choosing UKZN**

Figure 5.21 depicts the factors that impacted on student respondents choosing to study at UKZN.



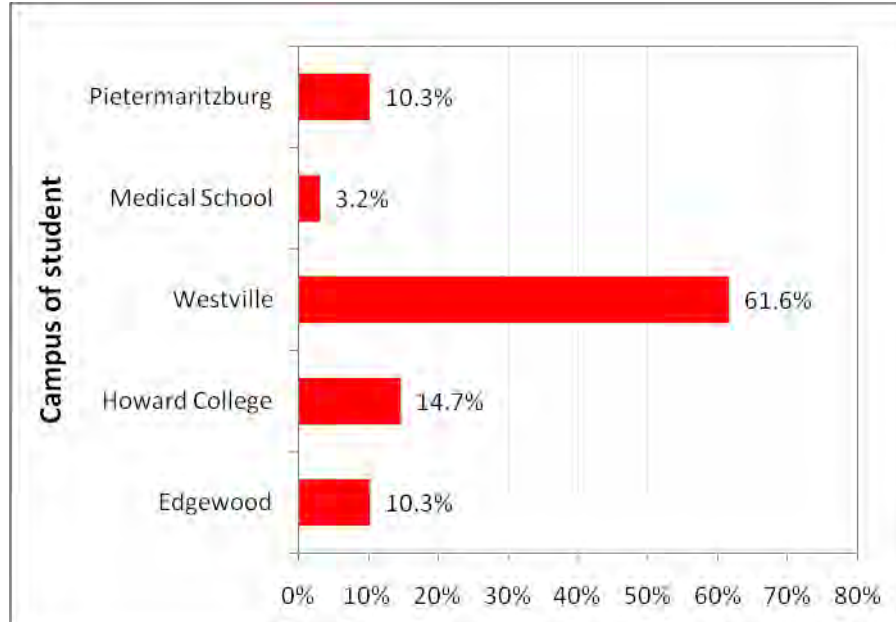
**Figure 5.21: Factors that impacted on student respondents choosing UKZN**

Figure 5.21 illustrates that the majority of student respondents (29.7%) chose UKZN due to its proximity to their home; followed by 28.7% due to other considerations (reputation of the University or a combination of all the other factors); 22.9% chose UKZN due to government funding; 11.1% because of family funding; and lastly, 7.6% due to the availability of accommodation at UKZN.



**j) Campus where student respondents are studying**

Figure 5.21 depicts the campus where student respondents are studying.



**Figure 5.22: Campus where student respondents are studying**

The majority of student respondents (61.6%) were studying at the Westville campus; followed by 14.7% at the Howard College campus; 10.3% at the Edgewood campus; 10.3% at the Pietermaritzburg campus; and the remaining 3.2% at the Medical School.

**5.2.2 Measures of Central Tendency and Dispersions and Gap Scores**

**5.2.3.1 Measure of central tendency and dispersions for the service quality dimensions for the staff sample**

The means, standard deviations, minimum and maximum scores for the service quality dimensions for the staff respondents are shown in Table 5.23 below.

**Table 5.23: Descriptive statistics – staff dimensions**

<b>Staff Respondents</b>	<b>N</b>	<b>Minimum</b>	<b>Maximum</b>	<b>Mean</b>	<b>Std. Deviation</b>
Tangibles expectation	257	2.53	5.00	4.3582	.54135
Reliability expectation	257	2.20	5.00	4.4000	.59948
Responsiveness expectation	257	1.00	5.00	4.4066	.60559
Empathy expectation	257	2.20	5.00	4.2498	.59635
Assurance expectation	257	2.53	5.00	4.5764	.57537
Tangibles perception	257	1.00	5.00	3.5274	.79209
Reliability perception	257	1.00	5.00	3.3751	1.03411
Responsiveness perception	257	1.00	5.00	3.4689	.90706
Empathy perception	257	1.00	5.00	3.6047	.82404
Assurance perception	257	1.07	5.00	3.8283	.75747

In terms of perceptions of the service quality dimensions, the mean scores were ranked from highest to lowest and reveal the following: assurance (m=3.8283), indicating that staff perceive the University as offering assurance; followed by empathy (m=3.6047), indicating that staff perceive the University as showing empathy; tangibles (m=3.5274), indicating that staff perceive the University as having a pleasant work environment and facilities; being slightly responsive (m=3.4689); and having a low level of reliability (m=3.3751).

The ranking of the variations in responses from the highest to the lowest showed the following for perceptions: reliability (SD=1.03411); responsiveness (SD=0.90706); empathy (SD=0.82404), tangibles (SD=0.79209); and assurance (SD=.75747). Whilst the highest variation was recorded for the reliability quality dimension, the minimum and maximum scores indicate that for all the dimensions, some subjects strongly disagreed that these service quality dimensions were present; others strongly agreed (Max=5.00) for all quality dimension variables.

Regarding expectations, the mean scores were ranged from the highest to the lowest and revealed the following: staff expected the University to offer more assurance (m=4.5764); they expected the University to be more responsive (m=4.4066); they expected the University to be more reliable (m=4.4000); they also expected the University to offer more attractive environment and better campus facilities (m=4.3582); and lastly they expected the University to be more empathetic (m=4.2498).

The ranking of the variations in responses from the highest to the lowest showed the following for expectations: responsiveness (SD=.60559); reliability (SD=.59948); empathy (SD=.59635); assurance (SD=.57537); and tangibles (SD=.54135). Whilst the highest variation was recorded

for the responsiveness quality dimension, the minimum and maximum scores indicate that for all the dimensions, some subjects strongly disagreed that these service quality dimensions were present; others strongly agreed (Max=5.00 ) that all quality dimensions are present.

Table 5.24 below indicates the Gap scores for staff respondents.

**Table 5.24: The Gap Scores for Staff Respondents**

<b>Staff respondents</b>	<b>Gap Scores</b>
Tangibles GAP score (P-E)	-0.8309
Reliability GAP score (P-E)	-1.0249
Responsiveness GAP score (P-E)	-0.9377
Empathy GAP score (P-E)	-0.6451
Assurance GAP score (P-E)	-0.7481
Overall GAP score (P-E)	-0.8374

The Gap scores for staff are indicative of the difference between their respective perceptions and expectations of UKZN’s service quality in respect of tangibles, reliability, responsiveness, empathy and assurance.

Table 5.24 illustrates that the Gap scores for the staff respondents are all negative. This indicates that the staff respondents’ expectations far exceeded their perceptions. The negative Gap scores are an indication that the staff are very dissatisfied with the quality of services provided by UKZN. The findings concur with the argument put forward by Kurtz et al (1998: 110) who explained that to evaluate the quality of services, customers would compare the service they received with the service they expected. If service quality were to be calculated mathematically, the formula would be P-E, with P being the customers’ perceived level of service received and E being consumer expectations prior to the service encounter. A negative number would indicate that expectations were not met (customers were dissatisfied). A zero would indicate that consumer expectations were met (customers were satisfied). A positive number would indicate that consumer expectations were exceeded (customers were highly satisfied).

The highest Gap score rated by staff was reliability (-1.0249), followed by responsiveness (-0.9377); tangibles (-0.8309); assurance (-.7481); and empathy (-0.6451).

### 5.2.3.2 Measure of central tendency and dispersions for the service quality dimensions for the student sample

The means, standard deviations, minimum and maximum scores for the service quality dimensions for the student respondents are shown in Table 5.25 below.

**Table 5.25: Descriptive Statistics – student dimensions**

Student respondents	N	Minimum	Maximum	Mean	Std. Deviation
Tangibles expectation	380	2.33	5.00	4.3881	.54348
Reliability expectation	380	1.40	5.00	4.2637	.77128
Responsiveness expectation	380	1.00	5.00	4.3783	.71901
Empathy expectation	380	1.60	5.00	4.2821	.73466
Assurance expectation	380	2.13	5.00	4.6300	.58950
Tangibles perception	380	1.00	5.00	3.6000	.74739
Reliability perception	380	1.00	5.00	3.1268	.98153
Responsiveness perception	380	1.00	5.00	3.1289	1.05590
Empathy perception	380	1.00	5.00	3.2479	.96368
Assurance perception	380	1.47	5.00	3.7802	.73658

In terms of perceptions of the service quality dimensions, the mean scores were ranked from highest to lowest and reveal the following: assurance (m=3.7802) indicating that students perceived the University as offering assurance; followed by tangibles (m=3.6000) whereby students perceived the University as having a pleasant learning environment and excellent facilities; empathy (3.2479) indicating that students perceived the University as showing empathy; students perceived the University as being slightly responsive (m=3.1289); and lastly students perceived the University as having a low level of reliability (m=3.1268).

The ranking of the variations in responses from the highest to the lowest showed the following for perceptions: responsiveness (SD=1.05590); reliability (SD=0.98153); empathy (SD=0.96368); tangibles (SD=0.74739); and assurance (SD=.73658).

Whilst the highest variation was recorded for the responsiveness quality dimension, the minimum and maximum scores indicate that for all the dimensions some subjects strongly disagreed that these service quality dimensions were present; others strongly agreed (Max=5.00) for all quality dimension variables.

Regarding expectations, the mean scores ranked from highest to lowest indicated the following: students expected the University to offer more assurance (m=4.6300); they expected the

University to offer a more attractive learning environment and better campus facilities (m=4.3881); they expected the University to be more responsive (m=4.3783); they expected the University to be more empathetic (m=4.2821); and lastly they expected the University to be more reliable (m=4.2637).

The ranking of the variations in responses from the highest to the lowest showed the following for expectations: reliability (SD=0.77128); empathy (SD=0.73466); responsiveness (SD=0.71901); assurance (SD=0.58950); and tangibles (SD=.54348).

Whilst the highest variation was recorded for the reliability dimension, the minimum and maximum scores indicated that for all the dimensions some subjects strongly disagreed that these service quality dimensions were present; others strongly agreed (Max=5.00) that all quality dimensions were present.

Table 5.26 below indicates the Gap scores for student respondents.

**Table 5.26: The Gap scores for students respondents**

<b>Student respondent</b>	<b>Gap Scores</b>
Tangibles GAP score (P-E)	-0.7881
Reliability GAP score (P-E)	-1.1368
Responsiveness GAP score (P-E)	-1.2493
Empathy GAP score (P-E)	-1.0342
Assurance GAP score (P-E)	-0.8498
Overall GAP score (P-E)	-1.0117

The Gap scores for student respondents are indicative of the difference between their respective perceptions and expectations of UKZN's service quality in respect of tangibles, reliability, responsiveness, empathy and assurance.

Table 5.26 illustrates that the Gap scores for the student respondents are all negative. This indicates that the student respondents' expectations far exceeded their perceptions. Therefore student were very dissatisfied with the quality of services provided by UKZN.

The highest Gap score rated by students was responsiveness (-1.2493), followed by reliability (-1.1368); empathy (-1.0342); assurance (-0.8498); and tangibles (-0.7881).

### 5.3 Reliability

The study used the Cronbach's co-efficient alpha to measure reliability. According to Litwin (1995: 31), a reliability coefficient of less than 0.5 is considered unacceptable. If the measure falls between 0.5-0.6, it is regarded as significant, and if it is above 0.7, it is regarded as good.

The Cronbach's Alpha for overall staff and student expectations respectively, was 0.975, representing a good significant level of internal reliability of the measuring instrument.

The Cronbach's Alpha for overall staff perceptions was 0.981 and for overall student perceptions it was 0.974, representing a good significant level of internal reliability of the measuring instrument.

The results of the Cronbach's Co-efficient alpha for tangible expectations, reliability expectation, responsiveness expectations, empathy expectations and assurance expectations for the staff and students are depicted and discussed in more detail below.

#### Tangible Expectation

**Reliability Statistics**

Group	Cronbach's Alpha	N of Items
Staff	.920	15
Student	.911	15

The Cronbach's Alpha for the tangible expectation dimension for staff (0.920) and students (0.911) are above 0.7 and are therefore considered to be good.

#### Reliability Expectation

**Reliability Statistics**

Group	Cronbach's Alpha	N of Items
Staff	.832	5
Student	.870	5

The Cronbach's Alpha for the reliability expectation dimension for staff (0.832) and students (0.870) are above 0.7 and are therefore considered to be good.

#### Responsiveness Expectation

#### Reliability Statistics

Group	Cronbach's Alpha	N of Items
Staff	.785	4
Student	.827	4

The Cronbach's Alpha for the responsiveness expectation dimension for staff (0.785) and students (0.827) are above 0.7 and are therefore considered to be good.

#### Empathy Expectation

##### Reliability Statistics

Group	Cronbach's Alpha	N of Items
Staff	.784	5
Student	.835	5

The Cronbach's Alpha for the empathy expectation dimension for staff (0.784) and students (0.835) are above 0.7 and are therefore considered to be good.

#### Assurance Expectation

##### Reliability Statistics

Group	Cronbach's Alpha	N of Items
Staff	.907	16
Student	.904	16

The Cronbach's Alpha for the assurance expectation dimension for staff (0.907) and students (0.904) are above 0.7 and are therefore considered to be good.

#### General Questions Expectation

##### Reliability Statistics

Group	Cronbach's Alpha	N of Items
Staff	.963	18
Student	.956	18

The Cronbach's Alpha for general questions (expectation items) for staff (0.963) and students (0.956) are above 0.7 and are therefore considered to be good.

The results of the Cronbach's Alpha for tangibles perceptions, reliability perceptions, responsiveness perceptions, empathy perceptions and assurance perceptions and general questions perceptions are depicted and discussed in more detail below.

### **Tangibles Perception**

**Reliability Statistics**

Group	Cronbach's Alpha	N of Items
Staff	.941	15
Student	.913	15

The Cronbach's Alpha for the tangibles perception dimension for staff (0.941) and students (0.913) are above 0.7 and are therefore considered to be good.

### **Reliability Perception**

**Reliability Statistics**

Group	Cronbach's Alpha	N of Items
Staff	.942	5
Student	.886	5

The Cronbach's Alpha for the reliability perception dimension for staff (0.942) and students (0.886) are above 0.7 and are therefore considered to be good.

### **Responsiveness Perception**

**Reliability Statistics**

Group	Cronbach's Alpha	N of Items
Staff	.859	4
Student	.898	4

The Cronbach's Alpha for the reliability perception dimension for staff (0.859) and students (0.898) are above 0.7 and are therefore considered to be good.



## Empathy Perception

### Reliability Statistics

Group	Cronbach's Alpha	N of Items
Staff	.862	5
Student	.863	5

The Cronbach's Alpha for the empathy perception dimension for staff (0.862) and students (0.863) are above 0.7 and are therefore considered to be good.

## Assurance Perception

### Reliability Statistics

Group	Cronbach's Alpha	N of Items
Staff	.933	16
Student	.903	16

The Cronbach's Alpha for the reliability perception dimension for staff (0.933) and students (0.903) are above 0.7 and are therefore considered to be good.

## General questions Perception

### Reliability Statistics

Group	Cronbach's Alpha	N of Items
Staff	.960	18
Student	.931	18

The Cronbach's Alpha for general questions (perception items) for staff (0.960) and students (0.931) are above 0.7 and are therefore considered to be good.

## 5.4 Inferential statistics

The hypotheses postulated in Chapters 1 and 4 were tested and the results are presented and analysed below.

**A) Perceptions of the service quality dimensions amongst certain biographical data for staff and students respectively**

**5.4.1 Hypothesis 1: There is a statistically significant difference in the perceptions of the service quality dimensions amongst the biographical data for the staff and students respectively**

**a) Perceptions of Service quality dimensions by Age**

**Table 5.27: Kruskal-Wallis Test – Age**

**Test Statistics<sup>a,b</sup>**

	Group					
	Staff			Student		
	Chi-Square	df	p	Chi-Square	df	p
Tangibles Perception	5.386	4	.250	3.475	3	.324
Reliability Perception	7.858	4	.097	11.412	3	.010
Responsiveness Perception	7.772	4	.100	7.969	3	.047
Empathy Perception	3.629	4	.459	3.986	3	.263
Assurance Perception	6.160	4	.187	4.791	3	.188
Overall Perception	8.005	4	.091	7.008	3	.072

a. Kruskal Wallis Test

b. Grouping Variable: Age

There is no statistically significant difference in the tangibles; reliability; responsiveness; empathy; or assurance perceptions amongst the different age groups representing the staff sample ( $p > 0.05$ ).

There is a statistically significant difference in the perceptions of the reliability dimension amongst the age groups representing the student sample ( $p < 0.05$ ). Although all the age groups in the student sample perceived the University to be reliable, the strongest perceptions were recorded by the 31 - 40 year age group followed by the 21 - 30 year age group. The students in these age categories possibly have strong perceptions about the University honouring the service promise made to them. These students have been on the campus far longer than first year students; therefore they understand the procedures in place and they know how the University operates.

There is a statistically significant difference in the perceptions of the responsiveness dimension amongst the age groups representing the student sample ( $p < 0.05$ ). Although all the age groups in the student sample perceived the University to be responsive, the strongest perceptions were recorded by the 31 - 40 year age group followed by the 21 - 30 year age group. These students

possibly have strongest perceptions that the University assists them in providing prompt services as they have developed a relationship with the University contact staff over the years and know what timeous services they provide.

There is no statistically significant difference in the perception of the other service quality dimensions amongst the age groups representing the student sample.

**b) Perceptions of service quality dimensions by gender**

**Test Statistics<sup>a</sup>**

	Group						
	Staff			Student			
	Mann-Whitney U	Z	p	Mann-Whitney U	Wilcoxon W	Z	p
Tangibles Perception	8060.500	-.042	.967	17905.500	36433.500	-.133	.894
Reliability Perception	7608.000	-.813	.416	16398.000	34926.000	-1.545	.122
Responsiveness Perception	7457.000	-1.073	.283	16984.500	35512.500	-.997	.319
Empathy Perception	7740.500	-.588	.557	16756.500	35284.500	-1.209	.227
Assurance Perception	8043.500	-.070	.944	16673.000	35201.000	-1.285	.199
Overall Perception	7736.000	-.592	.554	16811.000	35339.000	-1.156	.248

a. Grouping Variable: Gender

There is no statistically significant difference in the tangibles; reliability; responsiveness; empathy; or assurance perceptions amongst the male and female staff and students ( $p > 0.05$ ).

**c) Perceptions of service quality dimensions by years of formal education**

**Test Statistics<sup>a,b</sup>**

	Group					
	Staff			Student		
	Chi-Square	df	p	Chi-Square	df	p
Tangibles Perception	4.002	4	.406	13.305	4	.010
Reliability Perception	6.003	4	.199	17.191	4	.002
Responsiveness Perception	5.613	4	.230	13.653	4	.008
Empathy Perception	2.087	4	.720	9.081	4	.059
Assurance Perception	2.645	4	.619	13.205	4	.010
Overall Perception	4.932	4	.294	17.385	4	.002

a. Kruskal Wallis Test

b. Grouping Variable: Years of formal education

There is no statistically significant difference in the tangibles; reliability; responsiveness; empathy or assurance perceptions amongst the years of formal education of staff ( $p > 0.05$ ).

There is a statistically significant difference in the perceptions of the tangible dimension amongst the years of formal education of the student sample ( $p < 0.05$ ). The strongest perceptions were recorded by the > 6 years formal education group followed by the < 1 year formal education group. These students possibly have strong perceptions about the appearance of the University's physical facilities; equipment; personnel; and communication material (tangibles). The > 6 year formal education group have the highest perceptions, possibly because they have been at the University for a long time. They have probably witnessed the changes that have taken place over the years to improve the campus surroundings. The < 1 year group could be very new to a campus setting and therefore view everything around them as appealing.

There is a statistically significant difference in the perceptions of the responsiveness dimension amongst the years of formal education of the student sample ( $p < 0.05$ ). The strongest perceptions were recorded by the > 6 years formal education group followed by the < 1 year formal education group. These students possibly have strong perceptions that the University is willing to assist them and provide prompt services. The > 6 year formal education group have been around for a long time, are familiar with University procedures and processes and are happy with the responsiveness aspect of the service. The < 1 year student is possibly in awe of the University and thinks the responsiveness aspect of the service is impressive.

There is a statistically significant difference in the perceptions of the reliability dimension amongst the years of formal education of the student sample ( $p < 0.05$ ). Although the students had varying years of formal education they perceived the University to be very reliable; the strongest perceptions were recorded by the > 6 years formal education group followed by the < 1 year formal education group. These students possibly have strong perceptions that the University has systems in place that provide dependable and well-delivered services. The > 6 years formal education group have been at the University for a long time and are comfortable with the reliability aspect of the services offered by the University. The student with < 1 year formal education continues to be impressed by the newness of the University experience and thus is very taken with the reliability aspect of the University's service.

There is a statistically significant difference in the perceptions of the assurance dimension amongst the years of formal education of the student sample ( $p < 0.05$ ). The strongest perceptions were recorded by the > 6 years formal education group followed by the 5 - 6 years formal education group. These students possibly had strong perceptions that the University contact staff had the necessary knowledge and courtesy and were able to inspire trust and confidence during the service encounter. The > 6 years formal education group were possibly

veterans of the University and strongly supported the assurance dimension of the University service. The students within the < 1 year formal education group were in awe of the newness of the campus experience and believe in the assurance aspect of the University service.

There is no statistically significant difference in the empathy perceptions amongst the years of formal education of students ( $p > 0.05$ ). However the  $p$  value 0.059 shows that perceptions bordered on significant difference.

**d) Perceptions of service quality dimensions by marital status, staff and students respectively**

**Test Statistics<sup>a,b</sup>**

	Group					
	Staff			Student		
	Chi-Square	df	p	Chi-Square	df	p
Tangibles Perception	6.615	3	.085	4.043	3	.257
Reliability Perception	.516	3	.915	5.565	3	.135
Responsiveness Perception	.965	3	.810	2.264	3	.520
Empathy Perception	2.839	3	.417	1.907	3	.592
Assurance Perception	5.054	3	.168	3.959	3	.266
Overall Perception	2.101	3	.552	3.849	3	.278

a. Kruskal Wallis Test

b. Grouping Variable: Marital Status

There is no statistically significant difference in the tangibles; reliability; responsiveness; empathy; or assurance perceptions amongst the marital status groups representing the staff and student sample ( $p > 0.05$ ).

**e) Perceptions of service quality dimensions amongst the highest educational qualification categories of staff and students respectively**

**Test Statistics<sup>a,b</sup>**

	Group					
	Staff			Student		
	Chi-Square	df	p	Chi-Square	df	p
Tangibles Perception	8.499	4	.075	6.165	4	.187
Reliability Perception	10.469	4	.033	4.663	4	.324
Responsiveness Perception	8.548	4	.073	5.075	4	.280
Empathy Perception	.973	4	.914	6.653	4	.155
Assurance Perception	2.981	4	.561	9.926	4	.042
Overall Perception	5.816	4	.213	8.038	4	.090

a. Kruskal Wallis Test

b. Grouping Variable: Highest Qualification

There is a statistically significant difference in the perceptions of the reliability dimension amongst the highest educational qualification categories representing the staff sample ( $p < 0.05$ ). The strongest perceptions were recorded by staff that had diplomas, followed by other qualifications (certificate courses).

These staff were possibly keen to pursue further studies and their strong perceptions were possibly due to them believing that the University would pay for their future studies.

There is no statistically significant difference in the perceptions of the other service quality dimensions amongst staff having different educational qualifications.

There is a statistically significant difference in the perceptions of the assurance dimension amongst the highest educational qualification categories representing the student sample ( $p < 0.05$ ). The strongest perceptions were recorded by students with diploma qualifications, followed by students with degree qualifications. These students possibly had strong perceptions that the University contact staff had the necessary skills, knowledge and courtesy to deliver quality services. These students already had a diploma or degree so they are knowledgeable about the University environment and the contact staff that they interact with; therefore they strongly supported the assurance aspect of the service.

**f) Perceptions of service quality dimensions amongst the years that staff and students were employed respectively**

**Test Statistics<sup>a,b</sup>**

	Group					
	Staff			Student		
	Chi-Square	df	p	Chi-Square	df	p
Tangibles Perception	3.373	4	.497	7.035	4	.134
Reliability Perception	5.549	4	.235	9.403	4	.052
Responsiveness Perception	4.767	4	.312	7.257	4	.123
Empathy Perception	2.667	4	.615	9.477	4	.050
Assurance Perception	1.968	4	.742	3.508	4	.477
Overall Perception	3.686	4	.450	8.511	4	.075

a. Kruskal Wallis Test

b. Grouping Variable: Years employed

There is no statistically significant difference in the tangibles; reliability; responsiveness; empathy; or assurance expectations amongst the years that staff and students were employed respectively ( $p > 0.05$ ).

**g) Perceptions of service quality dimensions amongst the staff and students respectively at the different campuses**

**Test Statistics<sup>a,b</sup>**

	Group					
	Staff			Student		
	Chi-Square	df	p	Chi-Square	df	p
Tangibles Perception	22.868	4	.000	15.595	4	.004
Reliability Perception	6.581	4	.160	22.586	4	.000
Responsiveness Perception	7.413	4	.116	21.471	4	.000
Empathy Perception	6.928	4	.140	13.096	4	.011
Assurance Perception	16.948	4	.002	17.475	4	.002
Overall Perception	14.118	4	.007	17.344	4	.002

a. Kruskal Wallis Test

b. Grouping Variable: Campus

There is a statistically significant difference in the perceptions of the tangible dimension amongst the staff from the different campuses ( $p < 0.05$ ). Although the staff at the different campuses views the University as having high quality tangibles, the strongest perceptions were recorded for staff at Edgewood campus followed by the staff at the Medical School campus. These staff possibly have strong perceptions that the buildings, furniture and equipment were well maintained and physically appealing (tangibles) at these campuses.

There is a statistically significant difference in the perceptions of the assurance dimension amongst the staff from the different campuses ( $p < 0.05$ ). Although the staff at the different campuses perceived the University as having high levels of assurance, the strongest perceptions were recorded for staff at the Edgewood campus followed by staff at Pietermaritzburg campus. These staff possibly had strong perceptions that the University contact personnel exhibited the necessary knowledge and courtesy when providing them with services. They possibly also perceived their campus contact personnel as providing them with high levels of trust and confidence during the service encounter. Another possibility is that academic staff at these campuses perceived their support staff as having high levels of skills and honesty in providing them and their students with the necessary support services.

There is no statistically significant difference in the perceptions of the other service quality dimensions amongst the staff at the different campuses.

There is a statistically significant difference in the perceptions of the tangible dimension amongst the students from the different campuses ( $p < 0.05$ ).



Although the students at the different campuses perceived the University as having high quality tangibles the strongest perceptions were recorded at the Pietermaritzburg campus followed by the Medical School campus. Students at these campuses possibly had strong perceptions that the campus layout, buildings, furniture and equipment were well maintained and visually appealing.

There is a statistically significant difference in the perceptions of the reliability dimension amongst the students at the different campuses ( $p < 0.05$ ). Although the students at the different campuses perceived the University as being very reliable, the strongest perceptions were recorded at the Pietermaritzburg campus followed by the Medical School campus. Students at these campuses possibly have strong perceptions that the University delivers on its promises.

There is a statistically significant difference in the perceptions of the responsiveness dimension amongst the students at the different campuses ( $p < 0.05$ ). Although the students at the different campuses perceived the University to be very responsive in their service encounters, the strongest perceptions were recorded at the Pietermaritzburg campus, followed by the Edgewood campus. Students at these campuses possibly had strong perceptions that the University were willing to help them by providing prompt service.

There is a statistically significant difference in the perceptions of the empathy dimension amongst the students at the different campuses ( $p < 0.05$ ). Although the students at the different campuses perceived the University to be more empathetic, the strongest perception was recorded at the Pietermaritzburg campus, followed by the Medical School campus. Students at these campus centres possibly had strong perceptions that the University contact staff were very caring and offered them individualized attention when dealing with their queries and problems.

There is a statistically significant difference in the perceptions of the assurance dimension amongst the students at the different campuses ( $p < 0.05$ ). Although the students at the different campuses perceived the University as having high levels of assurance in the service encounters, the strongest perceptions were recorded at the Pietermaritzburg campus followed by the Medical School campus. Students at these campuses possibly had strong perceptions that the University contact staff were very courteous and knowledgeable during their service encounters.

**B) Expectations of the service quality dimensions amongst certain biographical data for staff and students respectively**

**5.4.2 Hypothesis 2: There is a statistically significant difference in expectations of the service quality dimensions amongst the biographical data variables for staff and students respectively**

**a) Expectations of service quality dimensions by age**

**Test Statistics<sup>a,b</sup>**

	Group					
	Staff			Student		
	Chi-Square	df	p	Chi-Square	df	p
Tangibles Expectation	4.399	4	.355	10.254	3	.017
Reliability Expectation	5.836	4	.212	4.585	3	.205
Responsiveness Expectation	10.219	4	.037	7.105	3	.069
Empathy Expectation	7.913	4	.095	5.832	3	.120
Assurance Expectation	4.037	4	.401	10.309	3	.016
Overall Expectation	7.168	4	.127	7.653	3	.054

a. Kruskal Wallis Test

b. Grouping Variable: Age

There is a statistically significant difference in the expectations of the responsiveness dimension amongst the age groups representing the staff sample ( $p < 0.05$ ). Although all the age groups in the staff sample expected the University to be responsive, the strongest expectations were recorded by the over 50 years age group, followed by the under 20 years age group. The staff in the over 50 years age group had been working for a long time at the University and have better knowledge of the processes and procedures. They therefore possibly had strong expectations that the University should assist them individually to address the complaints or queries that they encounter in their work situations. The staff in the under 20 years age group were possibly working for the University for the first time and were in awe at the size of the institution; therefore, they too, had high expectations of the University's responsiveness dimension.

There is no statistically significant difference in the expectations of the other service quality dimensions amongst the age groups representing the staff sample.

There is a statistically significant difference in the expectations of the tangible dimension amongst the age groups representing the student sample ( $p < 0.05$ ). Although all the age groups in the student sample expected the University to have high quality tangibles, the strongest

expectations were recorded by the 31 - 40 years age group, followed by the 21-30 years age group.

These students have been at the University for a long time and possibly have strong expectations that the University's buildings, furniture and equipment should be well maintained over the years and made more visually appealing.

There is a statistically significant difference in the expectations of the assurance dimension amongst the age groups representing the student sample ( $p < 0.05$ ). Although all the age groups in the student sample expected the University to have proper assurance, the strongest expectations were recorded by the 31 - 40 years age group, followed by the 21 - 30 years age group. These students had been at the University for a long time and possibly have strong expectations that the University contact staff should have had the necessary knowledge and courtesy when providing them with services. These students also expected contact staff to provide high levels of trust and confidence in their service encounters.

There is no statistically significant difference in the expectation of the other service quality dimensions amongst the age groups representing the student sample.

**b) Expectations of service quality dimensions amongst the gender categories of staff and students respectively**

**Test Statistics<sup>a</sup>**

	Group						
	Staff			Student			
	Mann-Whitney U	Z	p	Mann-Whitney U	Wilcoxon W	Z	p
Tangibles Expectation	8022.500	-.106	.915	17644.500	36172.500	-.378	.705
Reliability Expectation	7792.000	-.509	.611	16852.000	35380.000	-1.133	.257
Responsiveness Expectation	8082.500	-.004	.997	17262.500	35790.500	-.755	.450
Empathy Expectation	8085.000	.000	1.000	15918.000	34446.000	-2.026	.043
Assurance Expectation	7675.500	-.697	.486	16364.000	34892.000	-1.577	.115
Overall Expectation	7900.000	-.314	.753	16626.500	35154.500	-1.329	.184

a. Grouping Variable: Gender

There is no statistically significant difference in the tangibles; reliability; responsiveness; empathy or assurance expectations amongst the different genders representing the staff sample ( $p > 0.05$ ).

There is a statistically significant difference in the expectations of the empathy dimension amongst the gender groups representing the student sample ( $p < 0.05$ ). The strongest

expectations were recorded by male students. The male students possibly had stronger expectations that the University should be more caring and offer them individualized attention.

There is no statistically significant difference in the expectations of the other service quality dimensions amongst the gender groups representing the student sample.

**c) Expectations of service quality dimensions amongst the years of formal education categories of staff and students respectively**

**Test Statistics<sup>a,b</sup>**

	Group					
	Staff			Student		
	Chi-Square	df	p	Chi-Square	df	p
Tangibles Expectation	6.326	4	.176	2.779	4	.596
Reliability Expectation	2.965	4	.564	3.678	4	.451
Responsiveness Expectation	4.033	4	.402	4.910	4	.297
Empathy Expectation	4.904	4	.297	2.483	4	.648
Assurance Expectation	8.368	4	.079	3.070	4	.546
Overall Expectation	3.696	4	.449	3.340	4	.503

a. Kruskal Wallis Test

b. Grouping Variable: Years of formal education

There is no statistically significant difference in the tangibles; reliability; responsiveness; empathy; or assurance expectations amongst the years of formal education representing the staff sample ( $p > 0.05$ ).

There is also no statistically significant difference in the tangibles; reliability; responsiveness; empathy; or assurance expectations amongst the years of formal education representing the student sample ( $p > 0.05$ ).

**d) Expectations of service quality dimensions amongst the marital status categories of staff and students respectively**

**Test Statistics<sup>a,b</sup>**

	Group					
	Staff			Student		
	Chi-Square	df	p	Chi-Square	df	p
Tangibles Expectation	.706	3	.872	2.731	3	.435
Reliability Expectation	2.826	3	.419	5.041	3	.169
Responsiveness Expectation	4.402	3	.221	4.678	3	.197
Empathy Expectation	6.537	3	.088	7.629	3	.054
Assurance Expectation	3.756	3	.289	3.597	3	.308
Overall Expectation	3.912	3	.271	6.014	3	.111

a. Kruskal Wallis Test

b. Grouping Variable: Marital Status

There is no statistically significant difference in the tangibles; reliability; responsiveness; empathy or assurance expectations amongst the marital status groups representing the staff and student samples ( $p > 0.05$ ).

**e) Expectations of service quality dimensions amongst the different highest educational qualification categories of staff and students respectively**

**Table 5.39: Kruskal Wallis Test - highest qualification categories**

**Test Statistics<sup>a,b</sup>**

	Group					
	Staff			Student		
	Chi-Square	df	p	Chi-Square	df	p
Tangibles Expectation	1.877	4	.758	9.794	4	.044
Reliability Expectation	1.081	4	.897	5.822	4	.213
Responsiveness Expectation	3.220	4	.522	8.641	4	.071
Empathy Expectation	2.747	4	.601	6.029	4	.197
Assurance Expectation	3.302	4	.509	6.867	4	.143
Overall Expectation	1.158	4	.885	8.780	4	.067

a. Kruskal Wallis Test

b. Grouping Variable: Highest Qualification

There is no statistically significant difference in the tangibles; reliability; responsiveness; empathy; or assurance expectations amongst the highest education qualification categories representing the staff sample ( $p > 0.05$ ).

There is a statistically significant difference in the expectations of the tangibles dimension amongst the highest education qualification categories representing the student sample ( $p < 0.05$ ). Although all the highest education qualification categories representing the student sample expected the University to have good quality physical facilities and equipment, and professionally dressed staff, the strongest expectations were recorded by students with a post-graduate degree followed by students that had diplomas. These students were not as idealistic as first year students. They had been at the University before and have seen the changing University structures, equipment and buildings over time. They therefore, had strong expectations about the appealing nature of the University tangibles.

There is no statistically significant difference in the expectations of the other service quality dimensions amongst the highest education qualification categories representing the student sample.

**f) Expectations of service quality dimensions amongst the years that staff and students were employed respectively**

**Test Statistics<sup>a,b</sup>**

	Group					
	Staff			Student		
	Chi-Square	df	p	Chi-Square	df	p
Tangibles Expectation	.217	4	.995	5.681	4	.224
Reliability Expectation	4.181	4	.382	3.215	4	.522
Responsiveness Expectation	3.738	4	.443	6.302	4	.178
Empathy Expectation	2.342	4	.673	10.740	4	.030
Assurance Expectation	.448	4	.978	4.273	4	.370
Overall Expectation	1.040	4	.904	4.752	4	.314

a. Kruskal Wallis Test

b. Grouping Variable: Years employed

There is no statistically significant difference in the tangibles; reliability; responsiveness; empathy; or assurance expectations amongst the years employed representing the staff sample ( $p > 0.05$ ).

There is a statistically significant difference in the expectations of the empathy dimension amongst the years employed representing the student sample ( $p < 0.05$ ).

Although all the students in the different years employed groups expected the University to be empathetic, the strongest expectations were recorded by the students who were employed

between 11 and 15 years, followed by the students who were employed between 1 and 5 years. Possibly students who were employed between 11 and 15 years, were older and more mature and had a better understanding of service quality; therefore they expected more from the University in terms of its contact staff being more caring and offering them more individualized attention. The students within the 1 - 5 years working experience group were young and probably had part-time jobs to help them maintain their university lifestyle; they, too, expected care and consideration from university contact staff during their service encounters.

There is no statistically significant difference in the expectations of the other service quality dimensions amongst the years employed representing the student sample.

**g) Expectations of Service quality dimensions amongst the staff and students respectively at the different campuses**

**Test Statistics<sup>a,b</sup>**

	Group					
	Staff			Student		
	Chi-Square	df	p	Chi-Square	df	p
Tangibles Expectation	10.996	4	.027	11.348	4	.023
Reliability Expectation	5.449	4	.244	9.043	4	.060
Responsiveness Expectation	7.199	4	.126	11.747	4	.019
Empathy Expectation	11.772	4	.019	19.734	4	.001
Assurance Expectation	13.562	4	.009	7.961	4	.093
Overall Expectation	10.428	4	.034	14.852	4	.005

a. Kruskal Wallis Test

b. Grouping Variable: Campus

There is a statistically significant difference in the expectations of the tangible dimension amongst the staff from the different campuses ( $p < 0.05$ ). Although the staff at the different campuses all expected the University to have high quality tangibles, the strongest expectations were recorded at the Medical School campus, followed by the Edgewood campus. Staff at these campuses possibly had strong expectations that the University buildings, furniture and equipment should be well maintained and visually appealing (tangibles).

There is a statistically significant difference in the expectations of the empathy dimension amongst the staff from the different campuses ( $p < 0.05$ ).

Although all the staff at the different campuses expected the University to be more empathetic, the strongest expectations were recorded at the Medical School campus, followed by the Pietermaritzburg campus. Staff at these campuses possibly had strong expectations that the

University should be more caring and understanding and offer them individualized attention when dealing with their respective queries, problems, grievances and disputes.

There is a statistically significant difference in the expectations of the assurance dimension amongst the staff from the different campuses ( $p < 0.05$ ). Although all the staff at the different campuses expected the University to have proper assurance, the strongest expectations were recorded by staff at the Edgewood campus, followed by staff at Pietermaritzburg campus. Staff at these campus centres possibly had strong expectations that the University contact staff should have the necessary knowledge and courtesy when providing them with services. They possibly also expected contact staff to provide them with high levels of trust and confidence in the service encounter. Furthermore, academic staff at these campuses possibly expected their support staff to have high levels of skills and honesty in providing them with the necessary academic support services.

There is no statistically significant difference in the expectations of the other service quality dimensions amongst the age groups representing the staff sample.

There is a statistically significant difference in the expectations of the tangible dimension amongst the students from the different campuses ( $p < 0.05$ ). Although all the students at the different campuses expected the University to have high quality tangibles, the strongest expectations were recorded at the Pietermaritzburg campus, followed by the Howard College campus. Students at these campuses possibly had strong expectations that the campus layout, buildings, furniture and equipment should be well maintained and visually appealing.

There is a statistically significant difference in the expectations of the responsiveness dimension amongst the students from the different campuses ( $p < 0.05$ ). Although all the students at the different campuses expected the University to be very responsive in their service encounters, the strongest expectations were recorded at the Pietermaritzburg campus, followed by the Medical School campus. Students at these campuses possibly had strong expectations that the University should be more willing to help them and provide them with prompt services.

There is a statistically significant difference in the expectations of the empathy dimension amongst the students from the different campuses ( $p < 0.05$ ).

Although all the students at the different campuses expected the University to be more empathetic, the strongest expectations were recorded at the Pietermaritzburg campus, followed by the Howard College campus. Students at these campus centres possibly had strong



expectations that the University should be more caring in their service offerings and offer them individualized attention when dealing with their queries and problems.

There is no statistically significant difference in the expectations of the other service quality dimensions amongst the age groups representing the staff sample.

### C) GAP Scores

#### 5.4.3 Hypothesis 3: There is a statistically significant difference in the service quality Gaps for students and staff

**Table 5.41: Mann-Whitney Test- Gap scores for students and staff**

	<b>Mann-Whitney U</b>	<b>Z</b>	<b>P</b>
Tangibles GAP score (P-E)	48110.500	-.316	.752
Reliability GAP score (P-E)	45053.500	-1.661	.097
Responsiveness GAP score (P-E)	41181.000	-3.367	.001*
Empathy GAP score (P-E)	38540.500	-4.526	.000*
Assurance GAP score (P-E)	44783.500	-1.776	.076
Overall GAP score (P-E)	42738.000	-2.674	.008*

a. Grouping Variable: Group

The overall findings of this study indicate that there were statistically significant differences in the responsiveness and empathy Gap scores between staff and students ( $p < 0.01$ ). The hypothesis will thus be accepted.

The responsiveness and empathy Gap scores for students were the highest. This indicates that students have higher expectations that the University should to be more responsive and empathetic than the staff.

The results of the empirical study further indicated that there were no statistically significant differences in the Gap scores for the other quality dimensions.

**5.4.4 Hypothesis 4: There is statistically significant difference in the service quality Gaps for academic and support staff**

**Table 5.42: Mann-Whitney Test to compare GAP scores between Academic & Support/Admin Staff**

	<b>Mann-Whitney U</b>	<b>Z</b>	<b>P</b>
Tangibles GAP score (P-E)	7495.500	-.101	.920
Reliability GAP score (P-E)	7138.000	-.731	.465
Responsiveness GAP score (P-E)	7445.000	-.190	.849
Empathy GAP score (P-E)	7157.000	-.698	.485
Assurance GAP score (P-E)	7045.000	-.892	.372
Overall GAP score (P-E)	7530.500	-.039	.969

a. Grouping Variable: Category of staff

The results indicate that there is no statistically significant difference in the Gap scores between academic and support staff at the 95% level ( $p > 0.05$ ). The hypothesis will thus be rejected.

There was no statistically significant difference in the tangibles; reliability; responsiveness; empathy; and assurance Gap scores between academic staff and support staff.

**5.4.5 Hypothesis 5: There is a statistically significant difference in the Gaps between male and female students**

**Table 5.43: Mann-Whitney Test Statistics between Male & Female students**

<b>Group</b>		<b>Mann-Whitney U</b>	<b>Z</b>	<b>P</b>
Student	Tangibles GAP score (P-E)	17713.500	-.313	.755
	Reliability GAP score (P-E)	17298.500	-.701	.483
	Responsiveness GAP score (P-E)	17664.000	-.360	.719
	Empathy GAP score (P-E)	17796.500	-.235	.814
	Assurance GAP score (P-E)	17798.500	-.233	.816
	Overall GAP score (P-E)	17977.500	-.066	.947

a. Grouping Variable: Gender

The results indicate that there is no statistically significant difference in the Gap scores between the male and female students at the 95% level ( $p > 0.05$ ). The hypothesis will thus be rejected.

**5.4.6 Hypothesis 6: There is a statistically significant difference in the Gap scores between undergraduate and postgraduate students**

**Table 5.44: Mann-Whitney Test Statistics between UG/PG**

	Mann-Whitney U	Z	P
Tangibles GAP score (P-E)	8926.500	-.192	.848
Reliability GAP score (P-E)	7263.500	-2.386	.017*
Responsiveness GAP score (P-E)	8166.500	-1.196	.232
Empathy GAP score (P-E)	8707.000	-.482	.630
Assurance GAP score (P-E)	8316.500	-.996	.319
Overall GAP score (P-E)	8172.500	-1.185	.236

a. Grouping Variable: Student\_Q3

The results indicate that there is a statistically significant difference in the reliability Gap score between undergraduate and postgraduate students ( $z = -2.386$ ;  $p < 0.05$ ). The hypothesis is thus accepted.

The reliability Gap score for undergraduate students was -1.1883, and for postgraduate students it was -0.8393. This indicates that undergraduate students had higher expectations that the University would be more reliable.

There was no statistically significant difference in the tangibles; responsiveness; empathy; and assurance Gap scores between undergraduate and postgraduate students.

**5.4.7 Hypothesis 7: There is a statistically significant difference in the Gap scores amongst the local and international students**

**Table 5.45: Mann-Whitney Test Statistics between Local/International students**

	Mann-Whitney U	Z	P
Tangibles GAP score (P-E)	2075.000	-.355	.722
Reliability GAP score (P-E)	1640.000	-1.519	.129
Responsiveness GAP score (P-E)	2183.000	-.067	.947
Empathy GAP score (P-E)	2202.000	-.016	.987
Assurance GAP score (P-E)	2137.000	-.190	.850
Overall GAP score (P-E)	2023.000	-.494	.621

a. Grouping Variable: Student\_Q5

The results indicate that there is no statistically significant difference in the Gap scores between local and international students at the 95% level ( $p > 0.05$ ). The hypothesis will thus be rejected.

**5.4.8 Hypothesis 8: There is a statistically significant difference in the Gap scores amongst the students on the different UKZN campuses**

**Table 5.46: Kruskal-Wallis Test statistic between campuses for students**

	Group		
	Student		
	Chi-Square	df	p
Tangibles GAP score (P-E)	10.173	4	.038*
Reliability GAP score (P-E)	15.899	4	.003*
Responsiveness GAP score (P-E)	17.186	4	.002*
Empathy GAP score (P-E)	12.979	4	.011*
Assurance GAP score (P-E)	14.293	4	.006*
Overall GAP score (P-E)	17.301	4	.002*

- a. Kruskal Wallis Test
- b. Grouping Variable: Campus

The results of the empirical study indicate that there were statistically significant differences in the Gap scores for all the quality dimensions amongst the students at the different campuses ( $p < 0.05$ ). The hypothesis will thus be accepted.

For all the quality dimensions, the Gap scores were highest at the Howard College campus.

**5.4.9 Hypothesis 9: There is a statistically significant difference in the Gap scores between the male and female staff**

**Table 5.47: Mann-Whitney Test Statistics between Male & Female staff**

Group	Mann-Whitney U	Z	P
Staff Tangibles GAP score (P-E)	7589.000	-.842	.400
Staff Reliability GAP score (P-E)	7639.500	-.758	.448
Staff Responsiveness GAP score (P-E)	7830.000	-.435	.664
Staff Empathy GAP score (P-E)	7341.000	-1.267	.205
Staff Assurance GAP score (P-E)	7859.000	-.384	.701
Staff Overall GAP score (P-E)	7996.000	-.151	.880

- a. Grouping Variable: Gender

The results indicate that there is no statistically significant difference in the Gap scores between male and female staff at the 95% level ( $p > 0.05$ ). The hypothesis will thus be rejected. There was no statistically significant difference in the tangibles; reliability; responsiveness; empathy; and assurance Gap scores between male and female staff.

**5.4.10 Hypothesis 10: There is a statistically significant difference in the Gap scores between permanent and contract staff**

**Table 5.48: Mann-Whitney Test Statistics between Permanent and Contract staff**

	<b>Mann-Whitney U</b>	<b>Z</b>	<b>P</b>
Tangibles GAP score (P-E)	6529.000	-2.229	.026*
Reliability GAP score (P-E)	6345.500	-2.554	.011*
Responsiveness GAP score (P-E)	6543.500	-2.213	.027*
Empathy GAP score (P-E)	7432.000	-.673	.501
Assurance GAP score (P-E)	7226.500	-1.026	.305
Overall GAP score (P-E)	6460.500	-2.346	.019*

a. Grouping Variable: Type of employment

The results of the study indicate that there were statistically significant difference in the Gap scores for tangibles; responsiveness; and reliability dimensions between permanent and contract staff ( $p < 0.05$ ). The hypothesis is thus accepted.

There were no statistically significant differences in the empathy and assurance Gap scores between permanent and contract staff.

**5.4.11 Hypothesis 11: There is a statistically significant difference between the GAP scores for the general questions amongst students**

**Table 5.49: Comparison between perception and expectation for general questions**

	Expectations			Perceptions			GAP	Z	p
	Mean	N	Std. Deviation	Mean	N	Std. Deviation			
C44 - B44	4.34	380	0.80	3.74	380	0.95	-0.60	-9.244	0.000*
C45 - B45	4.50	380	0.77	3.99	380	0.97	-0.51	-7.778	0.000*
C46 - B46	4.47	380	0.75	3.74	380	1.12	-0.73	-9.344	0.000*
C47 - B47	4.55	380	0.69	3.51	380	1.09	-1.04	-12.162	0.000*
C48 - B48	4.51	380	0.69	3.64	380	0.99	-0.86	-11.415	0.000*
C49 - B49	4.46	380	0.85	3.32	380	1.23	-1.14	-11.926	0.000*
C50 - B50	4.46	380	0.82	3.52	380	1.17	-0.93	-10.859	0.000*
C51 - B51	4.48	380	0.73	3.58	380	0.92	-0.90	-11.959	0.000*
C52 - B52	4.44	380	0.77	3.53	380	1.06	-0.91	-11.476	0.000*
C53 - B53	4.42	380	0.76	3.50	380	1.08	-0.91	-10.932	0.000*
C54 - B54	4.41	380	0.88	3.21	380	1.25	-1.20	-12.603	0.000*
C55 - B55	4.45	380	0.87	3.32	380	1.35	-1.13	-11.599	0.000*
C56 - B56	4.48	380	0.81	3.74	380	1.06	-0.74	-9.709	0.000*
C57 - B57	4.42	380	0.88	3.18	380	1.24	-1.24	-12.583	0.000*
C58 - B58	4.43	380	0.78	3.65	380	1.03	-0.78	-10.082	0.000*
C59 - B59	4.32	380	0.90	3.30	380	1.27	-1.02	-10.842	0.000*
C60 - B60	4.48	380	0.78	3.51	380	1.11	-0.97	-11.325	0.000*
C61 - B61	4.46	380	0.82	3.50	380	1.11	-0.96	-11.330	0.000*
C62 - B62	4.49	380	0.79	3.60	380	1.04	-0.89	-11.078	0.000*
C63 - B63	4.43	380	0.82	3.46	380	1.08	-0.97	-11.348	0.000*

Table 5.49 shows that there are Gaps for all the general questions. Thus the hypothesis is accepted.

In order to better understand the above table, a few of the general statements posed to students in the survey are discussed.

For question 44 students were asked for their respective perceptions (P) and expectations (E) on whether UKZN provides high quality services to its international students. The results indicate that there is a statistically significant difference in the Gap score ( $z = -9.244$ ;  $p < 0.05$ ).

For question 45 students were asked for their respective perceptions (P) and expectations (E) on how well they viewed the ranking of UKZN in South Africa. The results indicate that there is a statistically significant difference in the Gap score ( $z = -7.778$ ;  $p < 0.05$ ).

For question 47 students were asked for their respective perceptions (P) and expectations (E) on how well they viewed academic staff services at UKZN. The results indicate that there is a statistically significant difference in the Gap score ( $z = -12.162$ ;  $p < 0.05$ ).

For questions 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 62 and 63, students were asked for their respective perceptions (P) and expectations (E) on services provided by exams; registration; risk management; graduation; student records; student information and applications; financial aid; SRC; library; student residence; wellness centre; Deans; and Executive management. The results indicated that there were statistically significant differences in the Gap scores for exam services ( $z = -11.415$ ;  $p < 0.01$ ); registration services ( $z = -11.926$ ;  $p < 0.05$ ); risk management services ( $z = -10.859$ ;  $p < 0.05$ ); graduation services ( $z = -11.959$ ;  $p < 0.05$ ); student records services ( $z = -11.476$ ;  $p < 0.05$ ); student information and applications services ( $z = -10.932$ ;  $p < 0.01$ ); financial aid services ( $z = -12.603$ ;  $p < 0.01$ ); SRC services ( $z = -11.599$ ;  $p < 0.01$ ); library services ( $z = -9.709$ ;  $p < 0.01$ ); student residence services ( $z = -12.582$ ;  $p < 0.05$ ); wellness centre services ( $z = -10.082$ ;  $p < 0.05$ ); Deans' services ( $z = -11.078$ ;  $p < 0.05$ ); and Executive management services ( $z = -11.348$ ;  $p < 0.05$ ).

The large Gap scores in the above services could be due to students having far higher expectations of these services. Students may also perceive the above services as being poor service centres within the University.

**5.4.12 Hypothesis 12: There is a statistically significant difference between the GAP scores for the general questions amongst staff**

**Table 5.50: Comparison between perceptions and expectations for general questions**

	Expectations			Perceptions			GAP	Z	p
	Mean	N	Std. Deviation	Mean	N	Std. Deviation			
C44 – B44	4.45	257	0.71	3.59	257	1.02	-0.86	-9.458	0.000*
C45 – B45	4.56	257	0.65	3.71	257	1.01	-0.85	-9.794	0.000*
C46 – B46	4.55	257	0.68	3.57	257	1.07	-0.98	-10.158	0.000*
C47 – B47	4.47	257	0.68	3.72	257	0.94	-0.75	-9.198	0.000*
C48 – B48	4.43	257	0.73	3.64	257	0.91	-0.79	-9.530	0.000*
C49 – B49	4.47	257	0.68	3.50	257	1.00	-0.97	-10.061	0.000*
C50 – B50	4.44	257	0.78	3.50	257	0.98	-0.95	-9.903	0.000*
C51 – B51	4.42	257	0.73	3.73	257	0.90	-0.69	-8.683	0.000*
C52 – B52	4.46	257	0.71	3.62	257	0.95	-0.84	-9.665	0.000*
C53 – B53	4.46	257	0.72	3.51	257	1.00	-0.95	-9.772	0.000*
C54 – B54	4.35	257	0.84	3.42	257	1.05	-0.94	-9.339	0.000*
C55 – B55	4.25	257	0.90	3.22	257	1.18	-1.03	-9.400	0.000*
C56 – B56	4.47	257	0.71	3.75	257	0.96	-0.71	-8.862	0.000*
C57 – B57	4.37	257	0.82	3.38	257	1.02	-0.99	-9.822	0.000*
C58 – B58	4.43	257	0.69	3.67	257	0.90	-0.76	-9.401	0.000*
C59 – B59	4.26	257	0.84	3.35	257	1.13	-0.92	-9.418	0.000*
C60 – B60	4.50	257	0.70	3.58	257	1.00	-0.92	-9.845	0.000*
C61 – B61	4.52	257	0.64	3.58	257	1.04	-0.94	-10.138	0.000*
C62 – B62	4.53	257	0.68	3.65	257	0.94	-0.88	-9.917	0.000*
C63 – B63	4.49	257	0.76	3.49	257	1.03	-1.00	-10.254	0.000*

In order to better understand the above table, it is important to discuss a few of the general statements posed to staff in the survey.

For Question 44 staff was asked for their respective perceptions (P) and expectations (E) on whether UKZN was well ranked in South Africa and internationally. The results indicate that there is a statistically significant difference in the Gap score ( $z = -9.458$ ;  $p < 0.05$ ).

For Question 56 staff was asked for their respective perceptions (P) and expectations (E) on library services. The results indicate that there is a statistically significant difference in the Gap score ( $z = -8.862$ ;  $p < 0.05$ ).



For Question 63 staff was asked for their respective perceptions (P) and expectations (E) on executive management at UKZN. The results indicate that there is a statistically significant difference in the Gap score ( $z = -10.254$ ;  $p < 0.05$ ).

## **5.5 Summary**

This chapter presented data emanating from the survey conducted amongst staff and students respectively at UKZN's five campuses. Descriptive and inferential statistics were used to answer the key research questions and hypotheses. Overall, it emerged that both staff and students at UKZN were very dissatisfied with the quality of services provided.

The following chapter will discuss the results emanating from the analysis of the data.

# **CHAPTER SIX**

## **DISCUSSION OF EMPIRICAL RESULTS**

### **6.1 Introduction**

This chapter will be based on an in-depth discussion of the empirical results. The research objectives of the study and the hypotheses set out in Chapters 1 and 4 are answered. The discussion will begin with student and staff perceptions of the tangibles, reliability, responsiveness, assurance and empathy quality variables pertaining to the service encounter. Thereafter the discussion will expand into students and staff expectations of tangibles, reliability, responsiveness, assurance and empathy quality variables pertaining to the service encounter. Lastly, the discussion will indicate any student or staff quality gaps found. Only where the results of the empirical survey indicate that there were statistically significant differences in tangibles, reliability, responsiveness, assurance and empathy variables for the staff and student perceptions, expectations and Gaps will these be included in the discussion below.

The discussion will commence on how the study objectives were met.

### **6.2 Discussion relating to research objectives of the study**

#### **6.2.1 Objective One: To identify models of service quality that may apply to tertiary institutions**

Various models are used to measure quality. These include the Disconfirmation of Expectations model developed by Oliver (1977; 1980 and 1981); the Nordic model developed by Gronroos (1984); the Six Sigma Model of service quality developed by Motorola in the 1980s; the SERVQUAL/Gaps model developed by Parasuraman, Zeithaml and Berry (1985, 1988, 1991) and the Three – Component model developed by Rust and Oliver (1994). Different scholars used the research of the initial theorists to build and expand on their models. The researcher saw little value in adapting the Six Sigma model to this study as it was designed to be utilized in a manufacturing organization. The method was developed by Motorola in the 1980s and relates to the elimination of defects. The Six Sigma model was not a good fit for this study even though it was a highly structured and integrated programme for developing customer orientated business processes.

According to Kasper et al (2006: 197 - 198), this model was well grounded in manufacturing, and more applicable to manufacturing organizations than pure service organizations.

This study used the SERVQUAL and Gaps model as it was easy to adapt to the tertiary education sector and many other theorists saw value in using this model. Many of the principles set out by Gronroos (1984), who was one of the founding fathers of service quality research, were adapted by Parasuraman, Zeithaml and Berry in the development of the SERVQUAL /Gaps model. Abu (2004: 635) states that some of the earliest research on service quality dimensions was done by Gronroos (1984). Gronroos (1984) postulated that the perceived quality of a service is affected by the experience that the customer goes through for a service. Therefore, he encapsulated the perceived quality of a given service as the outcome of the evaluation process; a comparison between the customer's expectations of the service with his/her perceptions of the service he/she has received. He also pointed out that expectations are influenced by tradition; ideology; word of mouth communication; and previous experience with the service; the customer's perception of the service itself determines his/her perceived service.

Due to the nature of tertiary institutions, the study adapted the questionnaire to the SERVQUAL model. This model of service quality serves as a foundation upon which this study was based. The variables in the tertiary education sector were adapted to the SERVQUAL instrument. The advantage of using this instrument was that Parasuraman, Zeithaml and Berry designed the SERVQUAL instrument in such a manner that it could be easily adapted to any service industry.

Parasuraman, Zeithaml and Berry (1985; 1988; 1999) developed their model by taking into account the work done by Gronroos (1984). They also supported Gronroos's findings based on three underlying themes, namely:

- 1) Service quality is more difficult for the customer to evaluate than the quality of goods.
- 2) Service quality perceptions result from a comparison of customer expectations with actual service performance.
- 3) Quality expectations are not based solely on the outcome of the service; they also involve evaluations of the process of the service (Parasuraman et al, 1985: 42).

Valerie Zeithaml (1985) and her colleagues developed the SERVQUAL scale/instrument to measure customer satisfaction with various aspects of service quality. According to Lovelock et al (2007: 420), in its basic form, the SERVQUAL instrument contains a scale of 22 perception items and a series of expectation items, reflecting the five dimensions of service quality, namely, tangibles; reliability; responsiveness; assurance; and empathy. However, despite the SERVQUAL instrument being widely used by service companies it has limitations. According to Lovelock et al (2007:420), the major limitation of the model is that the majority of researchers using SERVQUAL have omitted from, added to, or altered the list of statements purporting to measure service quality.

In this study, the research questionnaire was developed using the SERVQUAL instrument which was expanded upon and adapted to the tertiary education variables which tested service quality within UKZN. Five aspects of service quality provided at the University were tested, namely, tangibles, assurance; responsiveness; reliability; and empathy.

Strong arguments made in the literature favoured the use of the SERVQUAL instrument in this study. Soutars (1996: 75) indicates that there is merit in evaluating the performance of tertiary education institutions with a service marketing instrument such as SERVQUAL. Hittman (1993: 77 - 80) further suggests that the SERVQUAL model would seem rational to use as it not only evaluates the teaching component of a tertiary institution, but also includes aspects of the total service environment as experienced by the student.

The researcher also used the Gaps model developed by Zeithmal, Berry and Parasuraman (1984 - 1986) in conjunction with the SERVQUAL instrument. This model identified four potential gaps within a service organization. According to Metters (2006: 185), Parasuraman and colleagues (1985) conducted studies in several industry sectors to develop and refine the SERVQUAL, a multi-item instrument that quantified customers' global (as opposed to transaction - specific) assessment of a company's service quality. Their model is commonly known as the Gaps model. Their scale involved expectations – perceptions gaps scores along five dimensions: reliability; responsiveness; assurance; empathy; and tangibles. When Zeithaml, Parasuraman, and Berry (1985) asked more than 1 900 customers of five nationally known companies to allocate 100 points across the five service quality dimensions, they averaged as follows: reliability 32%; responsiveness 22%; assurance 19%; empathy 16%; and tangibles 11%. Although customers consistently reported that their most important quality dimension was reliability, this is the area where many service companies seemed to fail.

The SERVQUAL model conceptualizes service quality on the basis of the differences between customers' expectations with respect to the five dimensions and their perceptions of what was actually delivered. When a difference exists, it is characterized as a "Gap". The model was fashioned after remarkably consistent patterns emerged from the study's interviews. Although some perceptions about service quality were specific to the industries selected, commonalities prevailed. The commonalities suggested that a general model of service could be developed.

The most important insights obtained from analysing the responses was that "a set of key discrepancies or Gaps" exists regarding perceptions of service quality and the tasks associated with service delivery to customers. This study also adapted the Gaps model and identified the quality Gaps found within UKZN.

### **6.2.2 Objective Two: To identify how students at UKZN perceive the quality variables with respect to tangibles; reliability; responsiveness; assurance; and empathy**

For this study the SERVQUAL scale identified and tested the five dimensions of quality, namely: tangibles; reliability; responsiveness; empathy; and assurance.

In Questionnaire One designed for students, the perception questions appeared in Section A. Questions 18-21; 30; 32; 33; and 36 - 43 were questions relating to the tangible aspect of service quality. Questions 1 - 5 related to the reliability aspect of service quality. Questions 6 - 9 related to the responsiveness aspect of service quality. Questions 10 - 13; 23 - 26; 28; 29; 31; 34; 35; 4; and 46 related to the assurance aspect of service quality. Questions 14-17 and 22 related to the empathy aspect of service quality. The results of the students' perceptions of the quality dimensions are discussed below. In terms of perceptions of the service quality dimensions, the mean scores were ranked from highest to lowest and reveal the following: assurance (m=3.7802), indicating that students perceived the University as offering assurance, followed by tangibles (m=3.6000), whereby students perceived the University as having a pleasant learning environment and excellent facilities; and empathy (3.2479), indicating that students perceive the University as showing empathy. Students also perceived the University as being slightly responsive (m=3.1289); and lastly students perceived the University as having a low level of reliability (m=3.1268).

Assurance and tangibles dimensions were perceived by students in a very positive light as they rated these variables highest on their list. Empathy and responsiveness follow. Students perceived reliability as the lowest quality variable. The results of the study concur with the research conducted by Zeithaml et al (1985) that indicated that customers consistently reported

that their most important quality dimension was reliability. This seemed to be the area where many service companies failed. It seems that this is the case at the UKZN as well. Students at UKZN perceived reliability, which refers to the ability of the service provider to perform the promised service dependably and accurately, as being poorly handled by the University.

### **6.2.3 Objective Three: To determine students' expectations about the quality of tertiary education services**

For this study the SERVQUAL scale identified and tested the five dimensions of quality, namely: tangibles; reliability; responsiveness; empathy; and assurance.

In Questionnaire One designed for students the expectation questions appeared in Section B. Questions 18 - 21; 30; 32; 33; and 36-43 were related to the tangible aspect of service quality. Questions 1 - 5 were related to the reliability aspect of service quality. Questions 6 - 9 were related to the responsiveness aspect of service quality. Questions 10 - 13; 23 - 26; 28; 29; 31; 34; 35; and 46 were related to the assurance aspect of service quality. Questions 14-17 and 22 were related to the empathy aspect of service quality.

Regarding expectations, the mean scores ranked from highest to lowest indicated the following: students expected the University to offer more assurance ( $m=4.6300$ ); they expected the University to offer a more attractive learning environment and better campus facilities ( $m=4.3881$ ); they expected the University to be more responsive ( $m=4.3783$ ); they expected the University to be more empathetic ( $m=4.2821$ ); and lastly they expected the University to be more reliable ( $m=4.2637$ ).

Thus the results of the empirical study indicated that students had the highest expectations of assurance and tangibles. Students expected that an excellent university should aspire to assurance, i.e. contact staff should have the knowledge and courtesy to relate to them in a professional and pleasant manner. Students also expected an excellent university to have both academic and non-academic staff that inspires trust and confidence during the various service encounters.

With respect to tangibles, students expected an excellent university to have well-equipped seating in lecture venues, proper lighting in venues; well maintained furniture; and buildings, campus layout and facilities that are visually appealing.

#### **6.2.4 Objective Four: To identify how staff at UKZN perceive the quality variables with respect to tangibles; reliability; responsiveness; assurance; and empathy**

In Questionnaire Two designed for staff the perception questions appeared in Section A. Questions 18 - 21; 30; 32; 33; and 36 -43 were related to the tangible aspect of service quality. Questions 1 - 5 were related to the reliability aspect of service quality. Questions 6 - 9 were related to the responsiveness aspect of service quality. Questions 10 - 13; 23 - 26; 28; 29; 31; 34; 35; and 46 were related to the assurance aspect of service quality. Questions 14-17 and 22 were related to the empathy aspect of service quality.

In terms of perceptions of the service quality dimensions for staff respondents, the mean scores were ranked from highest to lowest and revealed the following: assurance (m=3.8283), indicating that staff perceived the University as offering assurance, followed by empathy (m=3.6047), indicating that staff perceived the University as showing empathy; and tangibles (m=3.5274), indicating that staff perceived the University as having a pleasant work environment and facilities. The staff also perceived the University as being slightly responsive (m=3.4689); and lastly the staff perceived the University as having a low level of reliability (m=3.3751).

The study revealed that staff perceived assurance and empathy as dimensions that the University was achieving. The results of the study also indicated that more needs to be done with respect to the reliability dimension of service quality. Since this aspect has been rated by Zeithaml et al (1985) as a major determinant of a service organization's failure, UKZN should do more to increase their staff's perceptions of reliability. The results of the findings concur with Bennett et al (2003: 85) who argued that reliability is essential to the success of service firms. Consumers are unlikely to do business with firms that have a reputation for unreliable service or for not keeping their promises about service delivery. A reasonable conclusion why staff viewed the University as not being reliable could possibly be due to the University making promises pertaining to the merger that it could not honour.

#### **6.2.5 Objective Five: Assessing UKZN staff expectations of quality of tertiary education services**

In Questionnaire Two designed for staff the expectation questions appeared in Section B. Questions 18 - 21; 30; 32; 33; and 36 -43 were related to the tangible aspect of service quality. Questions 1 - 5 were related to the reliability aspect of service quality. Questions 6 - 9 were related to the responsiveness aspect of service quality. Questions 10 - 13; 23 - 26; 28; 29; 31;

34; 35; and 46 were related to the assurance aspect of service quality. Questions 14-17 and 22 were related to the empathy aspect of service quality.

Regarding expectations, the mean scores were ranged from the highest to the lowest and revealed the following: staff expected an excellent University to offer more assurance (m=4.5764); they expected an excellent University to be more responsive (m=4.4066); they expected an excellent University to be more reliable (m=4.4000); they expected an excellent University to offer more attractive environment and better campus facilities (m=4.3582); and lastly they expected an excellent University to be more empathetic (m=4.2498). The results of the study indicate that staff expectations were highest for assurance and responsiveness. Staff believed that excellent universities should have employees that have the necessary knowledge, skills and courtesy to interact with them in the various service encounters. The findings concur with Parasaraman et al (1985: 41 - 45), who argued that assurance referred to the knowledge and courtesy of employees and their ability to inspire trust and confidence. Staff also believed that excellent universities should provide prompt services. The results concur with the argument raised by Parasaraman et al (1985: 41 - 45), who indicated that responsiveness refers to the service provider's willingness to help customers and provide prompt service.

#### **6.2.6 Objective Six: Examine the size and direction of any quality Gaps found between staff and students**

This objective is discussed in greater detail under hypothesis 3 and relates to the quality Gaps found for staff and students respectively.

The Gap scores for staff are indicative of the difference between their perceptions and expectations of UKZN's service quality in respect of tangibility; reliability; responsiveness; empathy; and assurance. According to Baron and Harris (1995: 162) Parasaraman, Zeithmal and Berry (1985) found that customers judge the quality of service by comparing the service they actually receive along the five quality dimensions with what they expected to receive.

In this study the results revealed that the Gap scores for the staff respondents were all negative. This indicates that staff expectations far exceeded their perceptions. The negative Gap scores are an indication that staff at UKZN are very dissatisfied with the quality of services provided by the University. The findings concur with the argument put forward by Kurtz and Clow (1998: 110), who indicate that in order to evaluate the quality of services customers compare the service they received with the service they expected. If service quality were to be calculated mathematically, the formula would be  $P-E$ , with P being the customer's perceived level of



service received and E being consumer's expectations prior to the service encounter. A negative number would indicate that expectations were not met (customers were dissatisfied). A zero would indicate that consumer expectations were met (customers were satisfied). A positive number would indicate that consumer expectations were exceeded (customers were highly satisfied).

The results indicated that the highest Gap score for staff was reliability (-1.0249); followed by responsiveness (-0.9377); tangibles (-0.8309), assurance (-.7481); and empathy (-0.6451).

The results of the findings concur with Metters (2006: 185), who highlighted that the quality research conducted by Zeithaml et al (1985) cited the highest Gap score for reliability. They indicated that this was where most service organizations failed. This study also indicated the same result for the reliability Gap score. Bennett et al (2003: 85) argued that reliability is essential to the success of service firms. Consumers are unlikely to do business with service firms that have a reputation for unreliable service or for not keeping their promises about service delivery. A reasonable conclusion why staff viewed UKZN as not being reliable could possibly be due to the University making promises pertaining to their salaries and not honouring them. The University had probably not taken inflation and the rising cost of living into account when granting pay increases. Scheider and White (2004: 100) suggested that if employees perceive that they are rewarded for delivering quality services, a positive service climate is more likely to permeate an organization.

The Gap scores for student respondents are indicative of the difference between their respective perceptions and expectations of UKZN's service quality in respect of tangibles; reliability; responsiveness; empathy; and assurance.

The results revealed that Gap scores for the student respondents were all negative. This indicates that the student respondents' expectations far exceeded their perceptions. Therefore student were very dissatisfied with the quality of services provided by UKZN. The results concur with Brink and Berndt (2004: 59), who argued that customers perceive services in terms of the quality of services provided and the satisfaction obtained. These two concepts; service quality and customer satisfaction, are the focus of attention of organizations because they want to quantify (measure) them. The reason for the focus on the quality of service and customer satisfaction is the belief that organizations can differentiate themselves by means of providing better service quality and overall customer satisfaction.

Furthermore, Kurtz and Clow (1998: 102) argued that when a customer evaluates the quality of a service, it is their perceptions that count, not what the service provider thinks. If the customer

perceives that he or she received poor service, then any decision about future patronage will be based on that perception. This concurs with the results of this study as students' perceptions of quality are very important and would influence their choice of service provider (the University). This is why UKZN management should conduct quality surveys at the University to remain informed about students' perceptions and tailor their services around what students want and not what management think they want.

Other studies also concur with the results of this study. A research study conducted among students at a New Zealand by Joseph and Joseph (1997: 17) found that the negative differences between the means of item responses with regard to the student respondents' perceptions of their own university and that of an ideal quality university suggested that New Zealand universities have not achieved a high perceived level of service quality which could give them a competitive advantage. Another study conducted among students at Brazil University by Oliveira et al (2009: 16) indicated that in relation to the application of the scale adapted to the production engineering course at UNESP/Bauru, none of the dimensions achieved a mathematically positive result, indicating that the perceptions are below expectations and there are faults in the service that are generating unsatisfactory results amongst students.

The highest Gap scores rated by students were responsiveness (-1.2493); followed by reliability (-1.1368); empathy (-1.0342); assurance (-0.8498); and tangibles (-0.7881). According to Palmer (2011:296), SERVQUAL results can be used to identify which components of a service a company is particularly good or bad at. This study indicated that responsiveness was one of the largest gaps in quality put forward by students.

To understand why the University is performing poorly in this area, one needs to first identify what the responsiveness variable entails. The results of this study concur with Bennett et al (2003: 86), who argued that responsiveness concerns how quickly and appropriately customers concerns; questions; requirements; and complaints are dealt with. Service providers communicate responsiveness through the length of time they require customers to wait for assistance or for a response to their problems. From the study, it seems that students with problems are not being attended to on time. They either have to wait a long time or are not attended to at all, and this causes great dissatisfaction with the service encounter.

### **6.2.7 Objective Seven: Examine the size and direction of any quality Gaps found between academic and non-academic staff**

The results indicated that there are no statistically significant difference in the Gap scores between academic and support staff at the 95% level ( $p > 0.05$ ). There was no statistically significant difference in the tangibles; reliability; responsiveness; empathy; and assurance Gap scores between academic staff and support staff. The lack of gaps between academic and support staff could be due to proper processes being in place to monitor staff's service performance at the University. The results of the study concur with Singh and Khanduja (2010: 303), who argued that in order to improve service quality, it is necessary to contact employees regularly and assess their service experiences. By assessing the quality of the service with knowledge of the internal service quality dimensions, the service organization can then judge how well the organization or its employees performed on each dimension and managers could identify the weakness in order to make improvements.

A lack of quality Gaps amongst the academic and support staff could also possibly be due to management devoting time and money to staff training initiatives and performance bonuses. According to Scheider and White (2004: 100) if employees perceive that they are rewarded for delivering quality services, if management devotes time, energy, and resources to service quality and when employees receive the training they require to effectively deal with diverse customers, a positive service climate is more likely to be attached to these experiences. Cartwright (2000:50-53) argues that quality practitioners like Deming and Juran stressed staff training as an important catalyst that can help improve and maintain high levels of quality within an organization. Cartwright (2000: 50) adds that Deming indicated that an organization committed to quality needs to provide constant training to its staff to ensure that their skills are up to date.

Money spent by an organization to effectively train its employees ensures that their skills are up to date, thus increasing overall productivity and efficiency levels within the organization. Thus money spent on effective training is never wasted and can help ensure that staff are able to meet and exceed customer expectations.

From the above discussion it can be seen that the objectives set in Chapters one and four have been met by this study.

The hypotheses raised in Chapters one and four are discussed in detail below.

### **6.3 Discussion relating to hypotheses**

#### **6.3.1 Perceptions of service quality dimensions by staff and students according to biographical categories**

The discussion below will address Hypothesis 1: There are statistically significant differences in perceptions of service quality dimensions amongst the biographical data variables for staff and students.

##### **6.3.1.1 Perceptions of service quality dimensions by age**

The results of the empirical study indicate that there is a statistically significant difference in the reliability and responsiveness perceptions of students in the different age categories.

There were statistically significant differences in the perceptions of the reliability dimension amongst the age groups representing the student sample ( $p < 0.05$ ). The hypothesis is accepted. The strongest perceptions were recorded by the 31 - 40 years age group, followed by the 21 - 30 years age group. The students in these age categories possibly have strong perceptions about the University honouring the service promises made to them as they have been on the campus far longer than first year students; therefore they understand the procedures in place and know how the University operates. The findings are in agreement with the literature, as Bateson (1992: 499) suggested that if promises are changed or broken, this will reflect adversely on the customer's perception of reliability.

There is a statistically significant difference in the perceptions of the responsiveness dimension amongst the age groups representing the student sample ( $p < 0.05$ ). The strongest perceptions were recorded by the 31 - 40 years age group, followed by the 21 - 30 years age group. These students possibly have strong perceptions that the University assists them by providing prompt services as over the years they have developed a relationship with the University contact staff and know what timeous services they provide. The findings concur with the literature as Bennett et al (2003: 86), suggested that a strategy aimed at increasing responsiveness includes ensuring that customers do not have to wait too long for assistance or to receive services.

### **6.3.1.2 Perceptions of service quality dimensions amongst students according to years of formal education**

There is a statistically significant difference in the perceptions of the tangible; reliability; responsiveness; and assurance dimensions amongst the years of formal education of the student sample ( $p < 0.05$ ). The hypothesis is accepted.

For tangibles the strongest perceptions were recorded by the > 6 years formal education group followed by the < 1 year formal education group. These students possibly have strong perceptions about the appearance of the University's physical facilities, equipment, personnel and communication material (tangibles). The > 6 years formal education group had the highest perceptions possibly because they have been at the campus for a long while; they probably witnessed the changes that have taken place over the years to improve the campus surroundings. The < 1 year group could be very new to a campus setting and they therefore viewed everything around them as appealing as they in awe of the newness of a university setting. The findings concur with the literature as Bennett et al (2003: 85), comment that the surrounding university environment plays a major role in students' sensory perceptions.

The strongest perceptions of the responsiveness dimension were recorded by the > 6 years formal education group followed by the <1 year formal education group. These students possibly had strong perceptions that the University was willing to assist them and provide prompt services. The > 6 years formal education category had been in a university setting for a long time, knew the ins and outs of University procedures and processes and are happy with the responsiveness aspect of the service. The many years spent on campus makes these students more aware of and familiar with the service offering in place. They know from previous experience the length of time it would take staff to attend to their problems and answer their questions.

The student who had been at university < 1 year had high perceptions of the responsiveness dimension possibly because they had just joined a university, are in awe of the university procedures and processes and think that the responsiveness aspect of the service is very impressive. The findings concur with the literature as Zeithaml et al (2009: 114) argued that responsiveness emphasizes attentiveness and promptness in dealing with customer requests, questions, complaints and problems. Responsiveness is communicated to customers by the length of time they have to wait for assistance, answers to questions, or attention to problems.

The strongest perceptions of reliability were recorded by the > 6 years formal education group, followed by the < 1 year formal education group. These students possibly had strong perceptions that the University has systems in place that allow for their services to be dependably and accurately delivered. The > 6 years formal education group had been on the campus for a long time and are comfortable with the reliability aspect of the service offered by the University. The students with < 1 year formal education continue to be impressed by the newness of the University experience and are happy with the reliability aspect of the University service. They also had no other yardstick with which to compare the reliability aspect of the service, as they came directly from school to university. These findings are substantiated by the literature, as Bennett et al (2003: 85) suggest that a strategy to promote reliability occurs when an organization develops systems and procedures that standardize service production to ensure that core services are delivered as reliably and consistently as possible.

The strongest perceptions of the assurance dimension were recorded by the > 6 years formal education group followed by the 5 - 6 years formal education group. These students possibly had strong perceptions that the University contact staff had the necessary knowledge and courtesy and are able to inspire trust and confidence during the service encounter. The > 6 years formal education group are possibly veterans of the University and strongly support the assurance dimension of the University service. Over the years, these students have developed a relationship with the University contact staff. They know the contact staff, trust them and are confident that they have the skills to provide good services. The students in the < 1 year formal education group were in awe of the newness of the campus experience and believed in the assurance aspect of the University service. Since these students were just out of school, they trust authority figures and the contact staff represents authority; they were therefore assured of the quality of the service offering. These findings, were substantiated by the literature, as Bateson (1992: 499) strongly suggested that assurance represents the customer's trust and confidence in the service and the courtesy and competence of the service provider.

#### **6.3.1.3 Perceptions of service quality dimensions by staff and students according to highest educational qualification categories**

There is a statistically significant difference in the perceptions of the reliability dimension amongst the highest education qualification categories representing the staff sample ( $p < 0.05$ ) only. The hypothesis is accepted. The strongest perceptions were recorded by staff that had diploma qualifications, followed by staff that had other qualifications (certificate courses). These staff possibly had such high perceptions because they were keen to pursue further studies

and believed that the University would pay for them. The staff relies on the University to support them in training and development as this in turn, would assist them to improve their overall job performance, efficiency and proficiencies which in turn would lead to the University providing high quality services that increase student satisfaction with the University's service offerings. The findings concur with the literature as Bennett et al (2003: 85) observe that reliability is essential to the success of service firms.

There is a statistically significant difference in the perceptions of the assurance dimension amongst the highest education qualification categories representing the student sample ( $p < 0.05$ ) only. The hypothesis is accepted. The strongest perceptions for the assurance dimension amongst the highest education qualification categories were recorded by students with diploma qualifications, followed by students with degree qualifications. These are knowledgeable about the University environment and the contact staff that they interact with, so they strongly support the assurance aspect of the service. These students possibly believed that the University contact staff had the necessary competence and courtesy to deliver services accordingly. These students had been on campus for a long time, and are assured of their safety and security at the University. The findings concur with the literature, studied as Kasper et al (2006: 189) indicated that assurance includes competence; courtesy; credibility; and security.

#### **6.3.1.4 Perceptions of service quality dimensions by staff and students on the different campuses**

There is a statistically significant difference in the perceptions of the tangibles and assurance dimensions amongst the staff from the different campuses ( $p < 0.05$ ). The hypothesis is accepted.

For tangibles, the strongest perceptions were recorded for staff at the Edgewood campus followed by the staff at the Medical School campus. These staff possibly had strong perceptions that the buildings; furniture; and equipment were well maintained and visually appealing at these campuses. The findings of the study concur with the literature, as Kasper et al (2006: 189) strongly suggested that elements of the service environment impact on perceived service quality, for instance, cleanliness of the premises; staff appearance: and appropriateness of things like computers, phones and decor.

The highest levels of assurance perceptions for staff were recorded at the Edgewood campus, followed by staff at Pietermaritzburg campus. These staff possibly had strong perceptions that the University contact personnel had the necessary knowledge and courtesy when providing

them with services. They possibly believed that their campus contact personnel provided them with high levels of trust and confidence during the service encounter. Another possibility is that academic staff at these campuses perceived their support staff to have high levels of skills and honesty in providing them and their students with the necessary support services. The findings concur with the comments raised in the literature by Kasper et al (2006: 189) who indicated that the assurance dimension included staff training in the use of tools and knowledge of their service processes, customer interaction, and the perception that the service is competent and will not harm anyone.

There is a statistically significant difference in the perceptions of students at the different campuses for all five quality dimensions ( $p < 0.05$ ). The hypothesis was accepted.

For tangibles, the strongest perceptions were recorded at the Pietermaritzburg campus, followed by the Medical School campus. Students at these campuses possibly had strong perceptions that the campus layout; buildings; furniture; and equipment were well maintained and visually appealing. The findings concur with what the literature. According to Zeithaml et al (2009: 115), tangibles provide physical representations or images that customers use to evaluate quality.

For reliability, the strongest perceptions were recorded at the Pietermaritzburg campus, followed by the Medical School campus. Students at these campuses possibly had strong perceptions that the University delivers on its promises. The literature concurs with the above findings, as Bateson (1992: 85) clearly suggests that customers are most likely to be loyal to firms that continually deliver on their promises.

The strongest perceptions for responsiveness were recorded at the Pietermaritzburg campus, followed by the Edgewood campus. Students at these campuses possibly had strong perceptions that the University is willing to help them and provide prompt service. The literature concurs with the above findings as Hoffman and Bateman (2006: 344) argue that responsiveness reflects a service firm's commitment to providing its services in a timely manner. Furthermore, Zeithaml et al (2009: 114) indicate, that the reverse is also true that and responsiveness perceptions diminish when customers are asked to wait.

The strongest perceptions for empathy were recorded at the Pietermaritzburg campus, followed by the Medical School campus. Students at these campus centres possibly had strong perceptions about the University treating them as valued customers. They may have also believed that the University's staff are very caring and offer them individualized attention when



dealing with respective queries and problems. The literature concurs with the above findings, as Bennett et al (2006: 86) indicate, that employees should understand the customers' needs, listen to their concerns and be patient with them at all times. Service firms also needed to ensure that customers feel that they are important and that the services provided are tailored to their needs.

High levels of assurance perceptions were recorded at the Pietermaritzburg campus, followed by the Medical School campus. Students at these campuses possibly had strong perceptions that the University contact staff was very courteous and knowledgeable during their service encounters. The literature concurs with the above findings, as Hoffman and Bateman (2006: 344 - 345) suggested that the SERVQUAL's assurance dimension addressed the competence of the firm, the courtesy it extended to customers, and the security of its operations.

### **6.3.2 Expectations of the service quality dimensions by staff and students according to biographical categories**

The discussion below will address hypothesis 2: There are statistically significant differences in expectations of service quality dimensions amongst the biographical data variables for staff and students.

#### **6.3.2.1 Expectations of service quality dimensions by age**

From the results of the empirical survey there appears to be a statistically significant difference in the expectations of the responsiveness dimension amongst the age groups representing the staff sample ( $p < 0.05$ ). The hypothesis is accepted.

The strongest responsiveness expectations were recorded by the over 50 years age group followed by the under 20 years age group. The staff in the over 50 years age group had been working for a long time within university structures and they therefore know the processes and procedures. They possibly had strong expectations that the University would assist them individually to sort out their complaints or queries. The staff in the under 20 years age group were working possibly within university structures for the first time. They had probably never worked anywhere else before and therefore have high expectations of the responsiveness dimension of UKZN.

The results of the empirical study reveal statistically significant differences in the expectations of the tangible and assurance dimensions amongst the age groups representing the student sample ( $p < 0.05$ ). The hypothesis is accepted.

For tangibles the strongest expectations were recorded by the 31 - 40 years age group followed by the years 21 - 30 years age group. These students had built up expectations over the years and possibly had strong expectations that the University's buildings, furniture and equipment should be well maintained and visually appealing.

For assurance, the strongest expectations were recorded by the 31 - 40 years age group followed by the 21 - 30 years age group. These strong expectations could be due to these students having been at university for a long time; they are knowledgeable about what universities and their contact staff are expected to provide in a service encounter. These students expected UKZN's contact staff to have the necessary knowledge and courtesy when providing them with services. Furthermore, these students expected contact staff to provide high levels of trust and confidence in their service encounters.

#### **6.3.2.2 Expectations of service quality dimensions by staff and students according to gender categories**

There is a statistically significant difference in the expectations of the empathy dimension amongst the genders representing the student sample ( $p < 0.05$ ). The hypothesis is accepted. The strongest expectations were recorded by the male students. The male students possibly had stronger expectations that the University should be more caring and offer them individualized attention.

#### **6.3.2.3 Expectations of service quality dimensions by staff and students according to educational qualifications categories**

There is a statistically significant difference in the expectations of the tangibles dimension amongst the highest educational qualification categories representing the student sample ( $p < 0.05$ ). The hypothesis is accepted. The strongest expectations were recorded by students with a postgraduate degree followed by students with a diploma. These students were not as idealistic as first year students. They have been at a university before and have witnessed the changing university structures, equipment and buildings over time. They therefore, have strong expectations of the appealing nature of an excellent university's tangibles.

#### **6.3.2.4 Expectations of service quality dimensions by staff and students according to years employed**

There is a statistically significant difference in the expectations of the empathy dimension between the years employed representing the student sample ( $p < 0.05$ ). The hypothesis is accepted. The strongest empathy expectations were recorded by students who were employed between 11 and 15 years, followed by the students employed between 1 and 5 years. Students who were employed between 11 and 15 years were possibly older and more mature and had a better understanding of service quality; therefore, they expected more from the University in terms of it being more caring and offering them more individualized attention. The students with 1 - 5 years working experience were young and probably had part-time jobs to help them maintain their university lifestyle; they, too, expected care and consideration from University contact staff during their service encounters.

#### **6.3.2.5 Expectations of service quality dimensions the the staff and students on the different campuses**

There is a statistically significant difference in the expectations of the tangibles; empathy; and assurance dimensions amongst the staff on the different campuses ( $p < 0.05$ ). The hypothesis is accepted. For tangibles, the strongest expectations were recorded at the Medical School campus followed by the Edgewood campus. Staff at these campuses possibly had strong expectations that the University buildings; furniture; and equipment should be well maintained and visually appealing.

For empathy, the strongest expectations were recorded at the Medical School campus followed by the Pietermaritzburg campus. Staff at these campuses possibly had strong expectations that the University should be more caring and understanding and offer them individualized attention when dealing with their queries, problems, grievances and disputes.

For assurance, the strongest expectations were recorded for staff at the Edgewood campus followed by staff at Pietermaritzburg campus. Staff at these campus centres possibly had strong expectations that the University contact personnel should have the necessary knowledge and courtesy when providing them with services. They possibly also expected contact personnel to provide them with high levels of trust and confidence in the service encounter. Furthermore, academic staff at these campuses possibly expected their support staff to have high levels of skills and honesty in providing them with the necessary support service offerings.

There are statistically significant differences in the expectations of the tangibles; responsiveness; and empathy dimensions amongst the students from the different campuses ( $p < 0.05$ ). The hypothesis is accepted. For tangibles, the strongest expectations were recorded at the Pietermaritzburg campus followed by the Howard College campus. Students at these campuses possibly had strong expectations that the campus layout; buildings; furniture; and equipment should be well maintained and visually appealing.

The strongest expectations for responsiveness were recorded at the Pietermaritzburg campus followed by the Medical School campus. Students at these campuses possibly strongly expected that the University should be willing to help them and provide them with prompt services.

For empathy, the strongest expectations were recorded at the Pietermaritzburg campus, followed by the Howard College campus. Students at these campus centres possibly had strong expectations that the University should be more caring and offer them individualized attention when dealing with their queries and problems.

The findings for all the expectations of the service quality dimensions amongst certain biographical data for staff and students respectively, concur with the literature as Abu (2004: 635) argued that expectation is influenced by tradition, ideology, word of mouth communication, and previous experience with the service. Furthermore, Baron and Harris (1995: 162) identified four key factors that might influence customers' expectations. These factors were reported in Parasuraman, Zeithaml and Berry's (1985) studies. They are as follows:

- Word of mouth communication, e.g. within UKZN what other students/staff or more specifically what students/staffs' friends think of the University has an influence on their expectations.
- Personal needs and expectations, e.g. whether a student at UKZN personally thinks that female educators make better academics since they are seen as being more sensitive and nurturing to the students than their male counterparts. This influences students' expectations of female academics at the University.
- Past experiences, e.g. if you are a Commerce student/staff member at the Westville campus, you would expect the library to have copies of your prescribed textbooks. However, if you are an exchange student/staff from another country that has just joined the Westville campus, you don't necessarily expect the library to carry your prescribed text book and this service would not form part of your service expectations.
- External communications, e.g. advertising the UKZN MBA degree in the *Sunday Times* may lead to some students wanting to register for the degree to make inferences about the quality of the degree before they become part of the program.

### 6.3.3 GAP scores

Hypothesis 3: Statistical significant difference in Gap scores for students and staff.

This hypothesis also relates to objective five set out in Chapters one and four of the study. The overall findings of this study indicate that there were statistically significant differences in the responsiveness and empathy Gap scores between staff and students ( $p < 0.05$ ). The hypothesis is accepted. The results revealed that students have greater expectations of the University being more responsive and empathetic than staff.

A large Gap score for responsiveness could be due to students feeling that they had to wait for long periods for services. UKZN employees were possibly busy with their own conversations with one another and ignored the needs of the students at the time of the service encounter.

The high empathy Gap score for students was possibly due to students feeling that the University did not care about them or share their concerns. Students expected the University to understand their needs and make services accessible. The findings concur with the literature, as Brink and Berndt (2004: 136) argue, that it is crucial for an organization to understand the values and expectations of each stakeholder group in order to determine their willingness either to help or hinder the organization in striving towards its vision. Positive matching of the needs and objectives of the stakeholders and the organization is therefore required for a lasting relationship. The value provided to a customer is not created by the organization alone but requires a contribution from other stakeholders as well.

A study conducted by Faganel (2010: 215) among student and faculty staff revealed that there was a different understanding of quality amongst students and staff. This also concurs with the findings of this study.

The results of this study did not concur with Zafiropoulos and Vrana's (2008:42) study amongst staff and students at a Greek university. This illustrated that while staff had higher expectations, they perceived current educational services to be of a higher level. Students had lower expectations and they perceived current educational services to be of a lower level. These findings could be attributed to several causes. They may reflect the experience that the staff had gained through education, training and studying in other institutions, or through employment experience. This experience could enable staff to value both their current situation as well as their current job, placing the home institution lower than the ideal but still high enough. In this study the opposite was true; the students had higher expectations than staff for the responsiveness and empathy quality variables.

Hypothesis 6: Statistical significant difference in gap scores for undergraduate and postgraduate students.

The results indicate that there is a statistically significant difference in the reliability Gap scores between undergraduate and postgraduate students ( $z = -2.386$ ;  $p < 0.05$ ). The hypothesis is accepted. The reliability Gap scores for undergraduate students were higher. This indicates that undergraduate students had greater expectations of the University being more reliable. This could be due to postgraduate students having a better understanding of University processes and services; therefore, they had lower expectations than undergraduate students of the University's ability to deliver a promised service dependably. The results both concur with and contradict the literature. A study by Tan and Kek (2004: 18, 22) found that students from the faculty of engineering at two universities in Singapore (named as University A and University B), indicated that, compared with undergraduates, the graduate students at University A perceived a higher level of service quality. For University B, the opposite was found to be the case (that is, graduate students at University B recorded a lower service quality compared with undergraduate students).

Hypothesis 8: Statistical significant difference in Gap scores for students within the different campuses.

The results of the empirical study indicate that there were statistically significant differences in the Gap scores for all the quality dimensions amongst the students at the different campuses ( $p < 0.05$ ). The hypothesis is accepted.

The Gap scores for all five quality variables were highest at the Howard College campus. This indicates that students at this campus expected the University to have better tangibles; be more reliable; responsive; and empathic; and have higher levels of assurance.

The reasons for these large quality gaps could possibly be as follows:

Tangible Gap - A possible reason why students at Howard College campus had such large quality gaps for the tangible dimension is that they indicated that the campus layout, facilities, lecture venues, buildings and equipment were very outdated and unappealing.

Reliability Gap - students at this campus may have felt that the promises made by the University when they first joined the campus had not been met. This could also be due to the University

personnel having had little understanding of their students' needs. Another reason could be that the University did not have up to date, current information on its students' needs. The 2010 student strikes are a reflection that promises made to students were not met; they therefore undertook strike action against the University management.

Responsiveness Gap – this could be due to the fact that no standardized procedures were in place in certain services delivery centres to maximise responsiveness to service situations that may occur reasonably regularly. For example, at registration, Faculty office staff should have had a common system in place where students who registered incorrectly on-line could complete a standard application form across all Faculties to make corrections to their registered modules. Another reason for the gap could be, that at this campus some of the staff lack training on how to respond to students. Lastly, there could be very few or a lack of procedure manuals that could help staff at this campus respond to students' questions, complaints and requests. All these factors impact on the size of the responsiveness gap.

Empathy Gap - at this campus, the students may have felt that the University does not understand them or their concerns. Furthermore, contact personnel at this campus could have been very un-empathetic to students at some point in the service delivery process.

Assurance Gap - students at this campus may have felt that the contact staff lacked knowledge and skills; therefore, they had less confidence and trust in them. The 2010 student strike at the Howard College campus had damaged the corporate brand image of the campus, which has had serious consequences on the way students view the University as a whole.

The following comments by Bennett et al. (2003) and Hoffman and Bateman (2006) concur with the findings of this study. According to Bennett et al (2003: 83) the Gaps model emphasized that managers must understand what customers expected from the service experience. They must also understand the barriers that prevent the firm from meeting the needs of its customers. Hoffman and Bateman (2006: 356) add that firms that excel in service quality do so by avoiding potential quality gaps in their delivery system. Numerous managerial, marketing and operational factors influence the size of each of these gaps.

Hypothesis 10: Statistical significant differences in gap scores for permanent and contract staff.

The results of the study indicated that there were statistically significant differences in the Gap scores for tangibles; responsiveness; and reliability between permanent and contract staff ( $p < 0.05$ ). The hypothesis is accepted. The large Gaps were due to permanent staff having higher expectations and lower perceptions of tangibles, responsiveness and reliability within the University.

The reasons for these large quality gaps could possibly be due to the following:

**Tangibles Gap** - Permanent staff have been at the University longer than contract staff; therefore, they would be more aware of their surroundings, in terms of the campus layout, buildings, lecture venues, offices, and equipment. An example could be that staff might have had the same equipment or office furniture for a long time and they felt that the University should have upgraded or refurnished their offices and equipment. This would influence the size of the tangibles Gap.

**Responsiveness Gap** - Permanent staff would be more aware of the University procedures; therefore, if they had experienced long delays in the University dealing with their problem or query they would have negative perceptions. These negative perceptions would have influenced the size of the responsiveness Gap. On the other hand, if their experience of the responsiveness dimension of the service encounter was positive, and their perceptions were positive, the responsive Gap would also be influenced accordingly.

**Reliability Gap** - This could be due to permanent staff having disputes or problems with the University and the outcomes having not gone in their favour; therefore, they felt that the University had not honoured the promises made to them. Word of mouth has a direct impact on perceptions. Staff talk amongst each other and if the University handles problems and disputes in a manner that is not acceptable to staff, this would influence other staff. They could fear that the University would implement the same action against them; therefore, their perceptions of the University would also be negative. This would have influenced the size of the reliability Gap.



Hypothesis 11: Statistical significant differences in Gap scores for students amongst the general questions.

Although only a few key general questions are discussed below, it is important to note that the empirical results indicated that there are statistically significant differences between the GAP scores for the general questions amongst students. The hypothesis is accepted.

For question 44, students were asked for their respective perceptions (P) and expectations (E) of whether UKZN provides high quality services to its international students. The results indicated a large Gap score. This could be due to students having greater expectations of the services provided to international students by the International Office staff. The findings concur with the literature, as Harris and Paddy (2010: 7 - 8) indicated that international students at Nelson Mandela Metropolitan University were very dissatisfied with the University's International Office based on their perceptions of unmet expectations of service.

Harris and Paddy (2010: 11 - 12) also argued that students expected high levels of service from tertiary institutions, because they were paying customers and should be treated as such.

Therefore, tertiary institutions need to instil a customer-responsive culture to ensure that their students are satisfied. This is especially relevant when attracting international students, who have a multitude of choices as to where to study abroad. Bennett et al (2003: 278) added that one of the difficulties with customer perceptions of what represents good value is that customers are all different. Therefore, setting a price for a service product that will be perceived by customers as good value requires considerable research. This is a typical situation where market research is required in order for the organization to determine the price range for a particular service that the target segment of customers considers to be good value for money.

For question, 45 students were asked for their respective perceptions (P) and expectations (E) of how well they viewed the ranking of UKZN in South Africa. The results indicate that there is a statistically significant difference in the Gap score ( $z = -7.778$ ;  $p < 0.05$ ). The ranking of a university has a lot to do with its research output, the strength of its teaching programs and its reputation in the country and abroad. A large Gap score could be due to students having greater expectations of the ranking of the University. The students could have also perceived the University as being poorly ranked in South Africa in terms of its program offerings and research. The results concur with the literature as Shanker et al's (2002: 571) survey amongst management students at Indian universities found that the students' choice of institution was based on reputation of the university, the number of applicants keen to enrol in the course, the past success rate for placement and faculty expertise.

For question 47, students were asked for their respective perceptions (P) and expectations (E) of how well they viewed academic staff services at UKZN. The results indicate that there is a statistically significant difference in the Gap score ( $z = -12.162$ ;  $p < 0.05$ ). A large Gap score could be due to students having high expectations of the services provided by academic staff. This could be due to students perceiving academic staff as lacking training, having very little experience or not being confident in their teaching. The literature concurs with these findings. According to Mazzarol (1998: 166), the ability of institutions to recruit and retain quality staff is a critical success factor. Bharadwaj and Menon (1993) demonstrated that, in the educational service industry, students selected courses on the basis of the reputation of teaching staff. Another study conducted amongst students in New Zealand by Joseph and Joseph (1997: 17) indicated that academic reputation was one of the most important factors.

For students, an institution with an academic reputation is one which has a prestigious degree program, is recognized nationally and internationally and has excellent instructors. Excellent instructors are an important variant that add value to the program and the institution, respectively.

For questions 48; 49; 50; 51; 52; 53; 54; 55; 56; 57; 58; 62; and 63, students were asked for their respective perceptions (P) and expectations (E) of services provided by exams; registration; risk management; graduation; student records; student information and applications; financial aid, SRC, library; student residence; wellness centre; Deans; and Executive management. The results indicated that there were statistically significant differences in the Gap scores for exam services ( $p < 0.05$ ); registration services ( $p < 0.05$ ); risk management services ( $p < 0.05$ ); graduation services ( $p < 0.05$ ); student records services ( $p < 0.05$ ); student information and applications services ( $p < 0.05$ ); financial aid services ( $p < 0.05$ ); SRC services ( $p < 0.05$ ); library services ( $p < 0.05$ ); student residence services ( $p < 0.05$ ); wellness centre services ( $p < 0.05$ ); Deans' services ( $p < 0.05$ ); and Executive management services ( $p < 0.05$ ). The large Gap scores in the above services could be due to students having far greater expectations of these services. Students may have also perceived the above services as being poor service centres within the University. Every year major problems are encountered in student registration, financial aid and student residence service centres. Students went on strike at UKZN in 2009, 2010 and 2011 to raise problems and disputes arising at these service centres. This indicates that the results of the study tally with what students perceived. Some of the above findings concur with Yeo (2008: 55), who indicated that the wider spaces and social interaction involving facilities such as laboratories; libraries; computers; sports; healthcare centres; and

cafeterias contribute to the service quality of any institution. For instance, high achieving university students have been found to make extensive use of support services.

Hypothesis 11: Statistical significant difference in Gap scores for staff amongst the general questions.

Although only a few key general questions are discussed below, it is important to note that the empirical results indicated that there are statistically significant differences between the GAP scores for the general questions amongst staff. The hypothesis is accepted.

For question 44, staff was asked for their respective perceptions (P) and expectations (E) of whether the UKZN was well ranked in South Africa and internationally. The results indicate that there is a statistically significant difference in the Gap score ( $z = -9.458$ ;  $p < 0.05$ ). A large Gap score could be due to staff having greater expectations of the ranking of the University. The staff could have also perceived the University as being poorly ranked in South Africa and internationally in terms of its program offerings and research. The lowering of standards in certain course programmes may have also impacted on staff having a low perception of the ranking of the University.

For question 56, staff was asked for their respective perceptions (P) and expectations (E) of library services. The results indicated that there is a statistically significant difference in the Gap score ( $z = -8.862$ ;  $p < 0.01$ ). A large Gap score could be due to staff having greater expectations of the University libraries and their service offerings. It is important to note that library services are an integral part of the support services provided to students at the University. Since many staff at the UKZN are studying at present, they could perceive the University as having libraries that have out dated books and other literary sources; this could have been problematic for them when they wanted to access current books and information. They could have also perceived the poor state of the libraries as being due to ineffective management and poor administration.

For question 63, staff was asked for their respective perceptions (P) and expectations (E) of executive management at UKZN. The results indicated that there is a statistically significant difference in the Gap score ( $z = -10.254$ ;  $p < 0.05$ ). A large Gap score could be due to staff perceiving the executive management at the University as providing poor leadership in certain areas, that is, they are administratively efficient, but not service oriented, which contributed to the low levels of service quality within the University. The findings concur with Metters et al (2006: 214), who argued that quality problems arise from the fact that managers do not have a good understanding of variation; they are distracted by their own, often unfounded,

assumptions, and they are susceptible to an array of mental biases that cause them to overvalue what they think they know.

#### **6.4 Summary**

This chapter discussed the data from the survey amongst staff and students respectively at UKZN's five campuses. Descriptive and inferential statistics was used to answer the key research questions. Based on the results obtained in line with the research objectives and the key hypotheses, it was shown that both staff and students were very dissatisfied with the quality of services provided by UKZN.

Chapter seven provides concluding remarks on the significant findings emanating from the study, and suggests recommendations for the consideration of UKZN management. The study's contribution to the body of knowledge is discussed and suggestions for future research in this field are presented.

## **CHAPTER SEVEN**

### **CONCLUSIONS AND RECOMMENDATIONS**

#### **7.1 Introduction**

The aim of this study was to identify service quality variables that impact on staff and student perceptions at the University of KwaZulu-Natal. This will enable the identification of any quality gaps in tangibles, reliability, responsiveness, assurance and empathy which can assist management to align strategies to close these gaps in the future. This chapter examines whether the research questions and related hypotheses presented in Chapters one and four have been successfully answered. Conclusions on the major findings are presented and discussed in terms of the literature review and the empirical study. Recommendations will also be presented. The study's contribution to the body of knowledge will be discussed and suggestions will be made for future research.

#### **7.2 Conclusions on the major findings of the study**

The first part of the conclusion is based on the literature review, while the second part will emphasise the empirical study results.

##### **7.2.1 Conclusions based on the literature review**

The literature review revealed that service quality is an abstract concept that is often difficult to define and quantify. The concept of quality therefore has different meanings and this creates a debate surrounding the area of "quality" research. From a strategic perspective, these variations in meanings create a complexity which often makes it difficult for a service organization to incorporate quality in its strategy and corporate culture in a holistic and synergistic manner.

The researcher concurred with the User-based definitions of quality identified by Lovelock et al (2007: 41). If applied to students and staff this would mean that each student and staff member would have a unique way of looking at the tertiary service they experience.

The researcher is also in agreement with Harvey and Green (*Assessment & Evaluation in Higher Education*; Vol.18 issue 1, 93:2) who comments that quality is often a relative concept. Firstly, quality is relative to the user of the term and the circumstances in which it is invoked.

Tertiary institution stakeholders include students, employers, teaching and non-teaching staff, government and its funding agencies, accreditors, validators, auditors, and assessors (including professional bodies). Each stakeholder has a different perspective on quality. For this study, quality perceptions are looked at from the student and staff perspective, as they are different stakeholders at the University.

Since the concept of quality is difficult to define, this will impact on the models used to measure quality. Various models are cited in the literature that can be used to measure service quality. Five of the key models highlighted in this study include; the Disconfirmation of Expectations model developed by Oliver (1977; 1980 and 1981), the Nordic model developed by Gronroos (1984); the Six Sigma Model of service quality developed by Motorola in the 1980s; the SERVQUAL/Gaps model developed by Parasuraman, Zeithaml and Berry (1985, 1988, 1991) and the Three – Component model developed by Rust and Oliver (1994). For this study the researcher used the SERVQUAL instrument/Gaps model to measure quality. This enabled the identification of the major Gaps amongst tangibles, reliability, responsiveness, empathy and assurance. Bennett et al (2002: 83) note that the Gaps model emphasizes that managers must understand what customers expect from the service experience. They must also understand the barriers that prevent the firm meeting the needs of its customers.

The researcher is in agreement with Bennett et al (2003) that if one were to identify the gaps amongst the quality variables, valuable insight could be gained on improving overall service quality within these variables.

The main benefit of employing the SERVQUAL measuring tool is that it can be adapted and used to test quality in numerous service industries such as healthcare, banking, financial and education. The problem with the SERVQUAL tool is not the measure itself, but rather with the manner in which the researchers use the tool. Soutars (1996: 75) indicates that there would appear to be merit in evaluating the performance of tertiary education institutions using a service marketing instrument such as SERVQUAL. Hittman (1993: 77 - 80) further suggests that the SERVQUAL model would seem rational to use as it not only evaluates the teaching component of a tertiary institution, but also includes aspects of the total service environment experienced by the student.

The literature review also identified the managerial, marketing and strategic issues that are directly and indirectly associated with service quality. Another aspect highlighted in the literature review was how to monitor and improve service quality. An in-depth analysis of services provided by the University was presented. Lastly, various quality studies conducted at

tertiary institutions were highlighted; the common theme that emanated from these studies was the importance of service quality.

## **7.2.2 Conclusions on the empirical study results**

### **7.2.2.1 Staff and Student perceptions and expectations of the service quality variables**

The discussion below will commence by highlighting staff perceptions and expectations of the quality variables such as tangibles, reliability, responsiveness, empathy and assurance. Thereafter student perceptions and expectations of the quality variables will also be outlined. Lastly the major quality Gap scores for students and staff will be discussed.

#### **7.2.2.1(a) Staff perceptions of quality variables such as tangibles, reliability, responsiveness, empathy and assurance**

The following findings were presented for perceptions of the service quality dimensions: assurance (m=3.8283), indicating that staff perceived the University as offering assurance; followed by empathy (m=3.6047), indicating that staff perceived the University as showing empathy; tangibles (m=3.5274), indicating that staff perceive the University as having a pleasant work environment and facilities; being slightly responsive (m=3.4689); and having a low level of reliability (m=3.3751).

#### **7.2.2.1(b) Staff expectations of quality variables such as tangibles, reliability, responsiveness, empathy and assurance**

With respect to expectations, the mean scores were ranged from the highest to the lowest and revealed the following: staff expected the University to offer more assurance (m=4.5764); they expected the University to be more responsive (m=4.4066); they expected the University to be more reliable (m=4.4000); they also expected the University to offer a more attractive environment and better campus facilities (m=4.3582); and lastly they expect the University to be more empathetic (m=4.2498).

#### **7.2.2.1(c) Student perceptions of quality variables such as tangibles, reliability, responsiveness, assurance and empathy**

The empirical findings indicated the following perceptions of the service quality dimensions: assurance (m=3.7802), indicating that students perceived the University as offering assurance; followed by tangibles (m=3.6000), whereby students perceive the University as having a pleasant learning environment and excellent facilities; empathy (3.2479), indicating that students perceived the University as showing empathy; students perceived the University as being slightly responsive (m=3.1289); and lastly students perceive the University as having a low level of reliability (m=3.1268).

#### **7.2.2.1(d) Student expectations of quality variables such as tangibles, reliability, responsiveness, empathy and assurance**

The following findings were revealed in this study: students expected the University to offer more assurance (m=4.6300); they expected the University to offer a more attractive learning environment and better campus facilities (m=4.3881); they expected the University to be more responsive (m=4.3783); they expected the University to be more empathetic (m=4.2821); and lastly they expected the University to be more reliable (m=4.2637).

#### **7.2.2.2 Gap Scores for staff and students**

##### **7.2.2.2 (a) Gap scores for staff**

The results of the empirical study indicate that the gap scores for the staff respondents are all negative. This indicates that the staff respondents' expectations exceeded their perceptions. Therefore staff respondents were dissatisfied with the quality of services provided by UKZN. The results of the study concur with Kurtz and Clow (1998: 110), who comment that in order to evaluate the quality of services, customers will compare the service they received with the service they expected. If service quality were to be calculated mathematically, the formula would be  $P - E$ , with P being the customer's perceived level of the service received and E being the consumer's expectations prior to the service encounter. A negative number would indicate that expectations were not met. A zero would indicate consumer expectations were met. A positive number would indicate consumer expectations were exceeded.



### **7.2.2.2 (b) Gap scores for students**

The results of the empirical study indicate that the Gap scores for the student respondents are all negative. This indicates that the student respondents' expectations exceeded their perceptions. Therefore student respondents are dissatisfied with the quality of services provided by UKZN. These findings concur with the literature. Joseph and Joseph's (1997: 17) research amongst students at a New Zealand university indicated that the negative differences between the means of item responses with regard to the respondents' perceptions of their own university and that of an ideal quality university suggested that New Zealand universities have not achieved a high perceived level of service quality which could give them a competitive advantage. Another study conducted amongst students at Brazil University by Oliveira et al (2009: 16) indicated that in relation to the application of the scale adapted to the production engineering course at UNESP/Bauru, the researchers observed that none of the dimensions achieved a mathematically positive result, indicating the perceptions are below expectations and that there are faults in the service that are generating unsatisfactory results amongst the students.

### **7.2.2.2 There is a statistically significant difference in the perceptions of the service quality dimensions amongst the biographical data for the staff and students respectively**

There is a statistically significant difference in the perceptions of the service quality dimensions amongst the biographical data for the staff and students respectively.

### **7.2.2.3 (a) Age**

The results of the empirical study indicate that there were no statistically significant differences in the tangibles; reliability; responsiveness, empathy; or assurance perceptions amongst the different age groups representing the staff sample ( $p > 0.05$ ).

The results of the empirical study indicate that there were statistically significant differences in the perceptions of the reliability and responsiveness dimensions amongst the age groups representing the student sample ( $p < 0.05$ ). The strongest perceptions of both quality dimensions were recorded in the 31 - 40 years age group. For the reliability dimension, these students possibly had strong perceptions that the University honours service promises made to them. For the responsiveness dimension, these students possibly had strong perceptions that the University would assist them by providing prompt services.

No statistically significant differences in the perceptions of the other service quality dimensions were recorded in the findings.

### **7.2.2.3 (b) Gender**

The results of the empirical study indicate that there were no statistically significant differences in the tangibles; reliability; responsiveness, empathy; or assurance perceptions recorded amongst male and female staff and students ( $p > 0.05$ ).

### **7.2.2.3 (c) Years of formal education**

The results of the empirical study indicate that there were no statistically significant differences in the tangibles; reliability; responsiveness; empathy; or assurance perceptions amongst the years of formal education of staff ( $p > 0.05$ ).

The results of the empirical study indicate that there were statistically significant differences in the perceptions of the tangible; responsiveness; reliability; assurance dimension amongst the years of formal education of the student sample ( $p < 0.05$ ).

For both the tangibles and responsiveness dimensions the strongest perceptions were recorded by the  $> 6$  years formal education group. These students possibly had strong perceptions about the appearance of the University's physical facilities; equipment; personnel; and communication material (tangibles). For the responsiveness dimension, these students possibly had strong perceptions that the University would be willing to assist them and provide prompt services.

The strongest perceptions of reliability were recorded by the  $> 6$  years formal education group. These students possibly have strong perceptions that the University has systems in place that allow for their services to be dependably and accurately delivered. The  $> 6$  years formal education group have been at the campus for a long time and are comfortable with the reliability aspect of the service offered by the University.

The strongest perceptions of the assurance dimension were recorded by the  $> 6$  years formal education group. These students possibly have strong perceptions that the University contact staff have the necessary knowledge and courtesy and are able to inspire trust and confidence during the service encounter. The  $> 6$  years formal education group are possibly veterans of the

University and strongly support the assurance dimension of the University service. They know the contact staff, trust them and are confident that they have the skills to provide good services.

There was no significant statistical difference recorded for the empathy dimension.

#### **7.2.2.3 (d) Marital status**

The results of the empirical study indicate that there were no statistically significant differences in the tangibles; reliability; responsiveness; empathy; or assurance perceptions recorded amongst the marital status groups amongst the staff and students ( $p > 0.05$ ).

#### **7.2.2.3 (e) Highest educational qualification**

There is a statistically significant difference in the perceptions of the reliability dimension amongst the highest educational qualification categories representing the staff sample ( $p < 0.05$ ). The strongest perceptions were recorded by staff that had a diploma. They possibly had strong perceptions that the University was able to deliver on a promised service. There were no statistically significant differences in the perceptions of the other service quality dimensions.

For the student sample, the empirical findings indicate that there were statistically significant differences in the perceptions of the assurance dimension amongst the highest educational qualification categories ( $p < 0.05$ ). The strongest perceptions were recorded by students with diplomas. These students perceive the University contact personnel as demonstrating competence; courtesy; skill; and knowledge to deliver services.

There was no statistically significant difference in the perceptions of the other service quality dimensions.

#### **7.2.2.3 (f) Years employed**

The results of the empirical study indicate that there were no statistically significant differences in the tangibles; reliability; responsiveness; empathy; or assurance perceptions amongst the years that staff and students were employed, respectively ( $p > 0.05$ ).

### **7.2.2.3 (g) Staff and students respectively at the different campuses**

The results of the empirical study indicate that there were statistically significant differences in the perceptions of the tangibles and assurance dimensions amongst the staff from the different campuses ( $p < 0.05$ ). For both dimensions the strongest perceptions were recorded for staff at Edgewood campus. For the tangible dimension, staff perceived the Edgewood campus buildings, furniture and equipment to be well maintained and visually appealing.

For the assurance dimension, staff perceived that the contact personnel at the Edgewood campus had the necessary knowledge and courtesy when providing them with services. Staff also perceived that contact personnel at Edgewood campus provided them with high levels of trust and confidence in the service encounter. Academic staff who works closely with their support staff at this campus possibly perceived their support staff as having high levels of skills and honesty in providing them and their students with the necessary support services.

The findings showed there were no statistically significant differences in the perceptions of the other service quality dimensions recorded.

The results of the empirical study indicate that there were statistically significant differences in the entire quality dimension amongst the students from the different campuses ( $p < 0.05$ ).

For all the quality dimensions, the strongest perceptions were recorded at the Pietermaritzburg campus. For the tangible dimension, students at this campus possibly had strong perceptions that the campus layout, buildings, furniture and equipment were well maintained and visually appealing. For the reliability dimension, students at the Pietermaritzburg campus perceived their campus as being very reliable. For the responsiveness dimension, students at this campus perceived their campus to be very responsive in their service encounters. For the empathy dimension, students at the Pietermaritzburg campus possibly had strong perceptions that their campus staff was caring and offered them individualized attention when dealing with their queries and problems. For the assurance dimension students at this campus possibly had strong perceptions that the PMB campus contact staff was courteous and knowledgeable during the service encounters.

#### **7.2.2.4 There are statistically significant differences in the expectations of service quality dimensions amongst the biographical data variables for staff and students**

##### **7.2.2.4 (a) Age**

The results of the empirical study indicate that there were statistically significant difference in the expectations of the responsiveness dimension amongst the age groups representing the staff sample ( $p < 0.05$ ). The strongest expectations were recorded in the over 50 years age group who possibly have strong expectations that the University would assist them individually with their complaints or queries that they encounter in their work situations. The findings also revealed that there were no statistically significant differences in the expectations for the other service quality dimensions amongst the age groups representing the staff sample.

The results of the empirical study indicate that there were statistically significant differences in the expectations of the tangible and assurance dimensions amongst the age groups representing the student sample ( $p < 0.05$ ). The strongest expectations for both these variables were recorded in the 31 - 40 years age category. For the tangibles dimension, students possibly had strong expectations that the University buildings; furniture; and equipment would be well maintained and visually appealing. For the assurance dimension, students may have possibly had strong expectations that the University contact staff would have the necessary knowledge and courtesy when providing them with services. Students may also have possibly expected the University's contact staff to provide high levels of trust and confidence in the service encounter.

The findings also revealed that there were no statistically significant differences in the expectations for the other service quality dimensions.

##### **7.2.2.4 (b) Gender**

The results of the empirical study indicate that there were no statistically significant difference in the tangibles; reliability; responsiveness; empathy; or assurance expectations amongst the gender groups representing the staff ( $p > 0.05$ ).

For the student sample, the findings revealed that there were statistically significant differences in the expectations of the empathy dimension amongst the gender groups ( $p < 0.05$ ). The male students strongly expect the University to be empathic.

The findings further revealed that there were no statistically significant differences in the expectations for the other service quality dimensions amongst the student gender groups.

#### **7.2.2.4 (c) Years of formal education**

The results of the empirical study indicate that there were no statistically significant differences in the tangibles; reliability; responsiveness; empathy; or assurance expectations amongst the years of formal education categories representing the staff and student samples ( $p > 0.05$ ).

#### **7.2.2.4 (d) Marital status**

The results of the empirical study indicate that there were no statistically significant differences in the tangibles; reliability; responsiveness; empathy; or assurance expectations amongst the marital status groups representing the staff and student samples ( $p > 0.05$ ).

#### **7.2.3.4 (e) Highest educational qualification**

The results of the empirical study indicate that there were no statistically significant differences in the tangibles; reliability; responsiveness; empathy; or assurance expectations amongst the highest educational qualification categories representing the staff samples ( $p > 0.05$ ).

The results revealed that, for the student sample, there were statistically significant differences in the expectations of the tangibles dimension amongst the highest educational qualification categories ( $p < 0.05$ ). The strongest expectations were recorded by students with a postgraduate degree. They expected the University to have state-of-the-art and visually appealing physical facilities and equipment and professionally dressed staff.

The findings also revealed that there were no statistically significant differences in the expectations of the other service quality dimensions.

#### **7.2.3.4 (f) Years employed**

The results of the empirical study indicate that there were no statistically significant differences in the tangibles; reliability; responsiveness; empathy; or assurance expectations amongst the years employed representing the staff sample ( $p > 0.05$ ).

The findings revealed that there were statistically significant differences in the expectations of the empathy dimension amongst the years employed representing the student sample ( $p < 0.05$ ). The strongest expectations were recorded by students who had been employed between 11 and 15 years. These students have worked for a long time and are more committed to their studies. Their expectations were that the University would be very caring in its provision of services.

In addition, the findings revealed that there were no statistically significant differences for the expectations for the other service quality dimensions.

#### **7.2.3.4 (h) Staff and students respectively on the different campuses.**

The results of the empirical study indicated that there were statistically significant differences in the expectations of the tangibles, empathy and assurance dimensions amongst the staff from the different campuses ( $p < 0.05$ ). The strongest expectations of tangibles and empathy were recorded at the Medical School campus. For the tangibles dimension, staff at the Medical School possibly had strong expectations that their campus buildings, furniture and equipment would be well maintained and visually appealing. For the empathy dimension, staff at the Medical School possibly had strong expectations that the staff at this campus was caring and understanding and offered them individualized attention when dealing with their queries, problems, grievances and disputes. For the assurance dimension, staff at the Edgewood campus revealed that they had strong expectations of the knowledge and courtesy of their campus contact personnel when they provided them with services. Staff at Edgewood campus also expected contact personnel to be honest and display confidence during the service encounter.

There were no statistically significant differences in the expectations of the other service quality dimensions.

The results of the empirical study indicated that there were statistically significant differences in the expectations of the tangibles, responsiveness and empathy dimensions amongst students from the different campuses ( $p < 0.05$ ). The strongest expectations were recorded at the Pietermaritzburg campus. For the tangibles dimension, students at this campus possibly have strong expectations that the campus layout, buildings, furniture and equipment would be well maintained and visually appealing. For the responsiveness dimension, students strongly expected the contact staff at the campus to be willing to help them and provide prompt services. For the empathy dimension, students expected the contact staff at the campus to be caring and offer them individualized attention when dealing with their queries and problems.

The results also revealed that there were no statistically significant differences in the expectations of the other service quality dimensions.

#### **7.2.3.5 Significant Differences in the Gap scores**

##### **7.2.3.5 (a) There are statistically significant differences in the service quality Gap scores for students and staff.**

The overall findings of this study indicate that there were statistically significant differences in the responsiveness and empathy gap scores between staff and students ( $p < 0.01$ ). The hypothesis was accepted. The responsiveness and empathy gap scores for students were higher. This indicates that students have higher expectations that the university will be more responsive and empathetic than the staff. A large Gap score for responsiveness could be due to students feeling that they had to wait for long periods for services. The high empathy Gap score for students was possibly due to students feeling that the University did not care about them or share their concerns. The results of the empirical study further indicated that there were no statistically significant differences in the Gap scores for the other quality dimensions. Faganel's (2010) findings concur with this study's findings. Faganel (2010: 215) argued that there is a difference in understanding quality between students and staff.

##### **7.2.3.5 (b) There are statistically significant differences in the service quality Gaps scores for academic and support staff.**

The results of the empirical study indicate that there were no statistically significant differences in the tangibles; reliability; responsiveness; empathy; and assurance gap scores between academic staff and support staff ( $p > 0.05$ ). The hypothesis was rejected.

##### **7.2.3.5 (c) There is a statistically significant difference in the Gap scores between male and female students.**

The results of the empirical study indicate that there were no statistically significant differences in the gap scores between male and female students at the 95% level ( $p > 0.05$ ). The hypothesis was rejected.



**7.2.3.5 (d) There is a statistically significant difference in the Gap scores between undergraduate and postgraduate students.**

The results of the empirical study indicated that there were statistically significant differences in the reliability gap score between undergraduate and postgraduate students ( $p < 0.05$ ). The hypothesis was accepted. Undergraduate students had high expectations that the University would be more reliable. The large gaps may also indicate that because undergraduate students had been at the University for a shorter period than postgraduates, they had less knowledge of University processes and procedures. They therefore expected the University to deliver on the promises it had made to them immediately; this is often not possible because University processes, procedures and policies that have a lot of “red tape” attached to them and is often takes a long time to provide students with a response or outcome. For the Gap scores for the other quality dimensions, no statistically significant differences were recorded.

**7.2.3.5 (e) There is a statistically significant difference in the Gap scores between the local and international students.**

The results of the empirical study indicate that there were no statistically significant differences in the gap scores between the local and international students at the 95% level ( $p > 0.05$ ). The hypothesis was rejected.

**7.2.3.5 (f) There is a statistically significant difference in the Gap scores between the students on the different campuses.**

The results of the empirical study indicate that there were statistically significant differences in the Gap scores for all the quality dimensions amongst the students at the different campuses ( $p < 0.05$ ). The hypothesis was accepted. For all the quality dimensions, the gap scores were highest at the Howard College Campus. This indicated that students expected this campus to have better tangibles, be more reliable and responsive, more empathic and have higher levels of assurance.

**7.2.3.5 (g) There is a statistically significant difference in the Gap scores of male and female staff.**

The results of the empirical study indicate that there were no statistically significant differences in the Gap scores between the male and female staff at the 95% level ( $p > 0.05$ ). The hypothesis was rejected.

**7.2.3.5 (h) There is a statistically significant difference in the Gap scores of permanent and contract staff.**

The results of the study indicated that there were statistically significant differences in the Gap scores for tangibles, responsiveness and reliability between permanent and contract staff ( $p < 0.05$ ). The hypothesis was accepted. The large gaps were due to permanent staff having higher expectations and lower perceptions of tangibles, responsiveness and reliability within the University. There were no statistically significant differences in the empathy and assurance Gap scores between permanent and contract staff.

**7.2.3.5 (i) There are statistically significant differences in the Gap scores for the general questions amongst students.**

For question 44, students were asked for their respective perceptions (P) and expectations (E) of whether UKZN provided high quality services to its international students. The results indicated that there were statistically significant differences in the Gap scores ( $p < 0.05$ ). The hypothesis was accepted. A large gap score could be due to students having higher expectations than perceptions of the services provided to international students by the International Office staff. It is possible that staff at the International Office were not meeting the needs of the international students.

For question 45, students were asked for their respective perceptions (P) and expectations (E) of how well they viewed the ranking of the UKZN in South Africa and abroad. The results indicate that there is a statistically significant difference in the Gap score ( $p < 0.05$ ). The hypothesis was accepted. The large gap indicates that students ranked UKZN poorly. This could have been due to them perceiving that the University has a poor research output, lacks strength in its teaching programs and has a poor reputation in the country and abroad. The poor reputation could also be due to all the negative publicity the UKZN received in 2009 and 2010.

For question 47, students were asked for their respective perceptions (P) and expectations (E) of how well they viewed academic staff services at the UKZN. The results indicated that there were statistically significant differences in the Gap score ( $p < 0.05$ ). The hypothesis was accepted. A large Gap score could be due to students perceiving that academic staff lacked training, had very little experience, or that they did not have confidence in their teaching ability.

For questions 48; 49; 50; 51; 52; 53; 54; 55; 56; 57; 58; 62; and 63, students were asked for their respective perceptions (P) and expectations (E) of services provided by exams; registration; risk management; graduation; student records; student information and applications; financial aid; SRCs; libraries; student residences; wellness centres; Deans; and Executive management.

The results indicated that there were statistically significant differences in the Gap score for: exam services ( $p < 0.05$ ); registration services ( $p < 0.05$ ); risk management services ( $p < 0.05$ ); graduation services ( $p < 0.05$ ); student records services ( $p < 0.05$ ); student information and applications services ( $p < 0.05$ ); financial aid services ( $p < 0.05$ ); SRC services ( $p < 0.05$ ); library services ( $p < 0.05$ ); student residence services ( $p < 0.05$ ); wellness centre services ( $p < 0.05$ ); Deans' services ( $p < 0.05$ ); and Executive management services ( $p < 0.05$ ). The hypothesis was accepted. The large Gap scores in the above services could be due to students having high expectations of these services. Students may also perceive the above services as being poor service centres within the University. Every year major problems are encountered in student registration, financial aid and student residence service centres. Students went on strike at UKZN in 2009, 2010 and 2011 due to problems and disputes arising in these service centres. This indicates that the results of the study tally with what students perceive.

#### **7.2.3.5 (j) There are statistically significant differences between the Gap scores for the general questions amongst staff.**

For question 44, staff were asked for their respective perceptions (P) and expectations (E) of whether UKZN was well ranked in South Africa and internationally. The results indicated that there were statistically significant differences in the Gap scores ( $p < 0.05$ ). The hypothesis was accepted. A large Gap score could be due to staff having high expectations of the ranking of the University. The staff could also perceive the University as being poorly ranked in South Africa and internationally in terms of its program offerings and research. The lowering of standards in course offerings may have caused staff to believe that the University was poorly ranked. Ranking also has a lot to do with research and staff believed that the University was poorly ranked because of its low research output in certain areas. However, due to large student numbers, academic staff workloads have increased; this adversely affected staff research output.

For question 56, staff were asked for their respective perceptions (P) and expectations (E) of library services. The results indicated that there were statistically significant differences in the Gap scores ( $p < 0.05$ ). The hypothesis was accepted. A large Gap score could be due to staff having high expectations of the University libraries and their service offerings. It is important to

note that library services are an integral part of the support services provided to students at the University. The high gaps could possibly be due to academic staff wanting the library to have more current books for their students to access. Another reason could be due to many staff currently enrolled as students at the University. They could perceive that the University libraries have out dated books and other sources; this is a problem when they need to access current books and information.

For question 63- staff were asked for their respective perceptions (P) and expectations (E) of executive management at UKZN. The results indicated that there were statistically significant differences in the Gap score ( $p < 0.05$ ). The hypothesis was accepted. A large Gap score could be due to staff perceiving the executive management at the University as providing poor leadership in certain areas; that is, they are administratively efficient, but not service oriented, which has contributed to the low levels of service quality within the University. Over the past few years staff at UKZN have embarked on strike action and litigation due to dissatisfaction with executive management. This has led to fear and demotivation on the part of staff that remain at the University.

This research study has illustrated that measuring service quality within tertiary institutions can help students and staff highlight their satisfaction and dissatisfaction with the services provided. It could be said that the greater the level of student and staff satisfaction, the stronger the link between them and the service provider (the University). The results of the empirical study demonstrated that both staff and students at UKZN were very dissatisfied with the quality of services provided.

### **7.3 Recommendations**

#### **7.3.1 Short and medium term recommendations for UKZN regarding students**

The short and medium term recommendations for UKZN regarding students are put forward for the quality variables below.

Tangibles:

- Improve the layout and physical facilities at all five UKZN campuses.
- Provide better equipment in laboratories and computer centres.
- Give libraries better facilities and better computers. Provide more up-to-date books and other materials.

- Clean and refurbish furniture in venues and, where necessary, replace it.
- Lecture venues should be clean and well lit.
- University brochures should be more colourful and trendy so that they appeal to the student population.
- The University should have proper facilities in place to cater for the needs of the disabled.
- Create recreational and social spaces created for students on all campuses.
- Contact personnel must be neat and presentable at all times.
- Provide adequate parking for students on all five campuses.

Reliability:

- The University management should develop systems and procedures that standardize service production to ensure that the core service is delivered as reliably and consistently as possible.
- Before management commits to any marketing communication aimed at students, they should ensure that the promises made are realistic and achievable.
- University management needs to understand students' changing and varying needs and conduct up-to-date market research on a regular basis.
- Customer expectations of the reliability aspect of the service encounters and offerings made to students must always be well managed.

Responsiveness:

- Management should implement standard procedures to maximise responsiveness to service situations that may occur reasonably regularly.
- Management must insist that staff are trained well, so that they can respond when necessary.
- Management should develop procedure manuals to help staff respond to customer questions, complaints and requests.
- Contact staff must at all times ensure that students do not have to wait too long for assistance or to receive a service.
- Where possible, management should individualize or customize the service as much as possible.
- Management must have knowledge of how the service process and outcomes are viewed by students.

Assurance:

- Management should create trust and confidence in the service encounter through the knowledge, skills and expertise of its contact personnel.
- Creating continuity of service staff is important as this enhances student assurance levels.
- Management should create an organization-wide image that reflects the core values of the University, including its commitment to quality teaching; research and community engagement.
- Management should build a strong corporate brand image that reflects the high quality of its service offerings and the University's commitment to research and teaching and learning.
- Management can also use cues such as employee dress, the interior and exterior appearance of its campuses, positive employee attitudes, visible qualifications and credentials of its staff, and pleasant campus surroundings to reassure students and their parents.
- During strikes and other violent disruptions on campus, management should ensure the safety of students at all times.
- There should be proper security in place to ensure that students and their vehicles are safe.

Empathy:

- Contact staff should make students feel that they important by responding to their needs and understanding their concerns.
- Contact staff should be trained to be more empathetic towards the needs of students, especially those from disadvantaged backgrounds such as rural students who have very little exposure to city life. Contact staff should also be more helpful and empathetic to disabled students with special needs.
- Service offerings should be tailored to individual student needs as much as possible.
- Make students feel important by developing long-term relationships with them.
- Train staff to know students by name where possible and by their related service needs.

### **7.3.2 Short and medium term Recommendations for UKZN regarding staff**

The recommendations for UKZN regarding staff are put forward for the quality variables as follows:

Tangibles:

- Staff should be provided with a pleasant working environment.
- Staff should have the best equipment on hand that can improve their efficiency. This might include the latest computer equipment, scanners, photocopiers and printers.
- Academic staff should be provided with modern teaching aids that can help them present better lectures. This could include laptop computers to present high quality power-point presentations and microphones for teaching in large lecture halls.
- Staff should have comfortable office spaces that are airy and well lit.
- Staff toilets should be clean, tidy and easily accessible.
- Staff should have nicely furnished and comfortable tea-rooms where they can take their lunch and tea breaks.
- Proper facilities should be in place for staff that are disabled.
- More parking facilities should be provided for staff.

#### Reliability:

- University management should conduct annual staff surveys in order to gain an understanding of staff needs.
- Staff expectations of the reliability aspect of the service encounters and offerings made should be well managed.
- Promises made to staff must be honoured by University management.

#### Responsiveness:

- Management should implement standard procedures to maximise responsiveness to service situations that may occur regularly for staff.
- Management must insist that academic support staff be well trained to provide the necessary support to academic staff.
- Management should develop procedure manuals to help staff respond to staff questions, complaints and requests.
- Staff must not be kept waiting for too long; they should receive prompt services within the University's various service encounter sectors.
- Management must have knowledge of how service processes and outcomes are viewed by staff.

#### Assurance:

- Staff require skilled and knowledgeable personnel to handle their requests, queries, problems or disputes with the University.
- It is important to create continuity of service staff.

- Management should create an organization-wide image that reflects the core values of the University, including its commitment to quality teaching; research and community engagement.
- Management should build a strong corporate brand image that reflects the high quality of the service offering and the University's commitment to research and teaching and learning.
- Management should ensure the safety of staff at the workplace.
- Staff that do not engage in student and staff protests should be protected at all times.
- Staff should be protected from students and parents that harass them.
- Proper security should be provided to ensure the safety of staff vehicles.

**Empathy:**

- Management should make staff feel important by responding to their needs and understanding their concerns.
- Management and staff who interact with other staff should be trained to be more empathetic towards the needs of staff members.
- Management should focus on making staff feel important by developing long-term relationships with them.
- Management and administrators should be more empathetic to staff that have lost a loved one.
- Management and administrators should be more empathetic to staff that suffer from a chronic illness or are on sick leave.
- Management should be empathetic to academic staff who are studying towards their Masters and PhD degrees and reduce their lecture and administrative workloads where possible.
- Management should be more supportive and empathetic towards staff that have young children by providing more day care facilities at all five campuses.

### **7.3.3 General Recommendations**

The general recommendations for quality are longer term orientated and will be dealt with under the following four areas and discussed as follows:



### **7.3.3.1. Develop strategies and related policies that tie in with managerial issues associated with service quality**

#### **7.3.3.1 (a) Emphasize the development of a culture of service quality**

Starting at the very top and moving down through the ranks to the newest employee, the University should be actively engaged with its staff at all levels to develop and encourage a culture of service quality. Management and staff at all levels should pride themselves on serving the University with pride and confidence and approaching students and other key role players in the tertiary education sector with helpfulness and integrity. In order to develop a culture of quality service, management should hire the right people, educate and train their staff well, recognize and reward staff regularly and be transparent with both staff and students about what is happening at the University. Cartwright (2000:50) notes that, Deming's 14<sup>th</sup> point states that transformation is everybody's job. Everybody means everybody: senior managers, middle managers, clerks, salespeople, operators and cleaners. All have a role to play in the quality process. A dirty floor may lead to accidents that lead to a bad product; a badly answered telephone can lead to a lost order. Quality is everybody's business and everybody should enhance their quality and customer care skills. Even if they never meet an external customer they are all part of the internal customer value chain.

#### **7.3.3.1 (b) Integrate ethics into the service delivery process**

The ethical issues University management is confronted with include:

- Kickbacks made to staff by students who want to gain entrance to the University or kickbacks made to management by suppliers who want to be awarded tenders to do work for the University.
- Academic plagiarism.
- Honesty in conducting University business with various stakeholders.
- Conflicts of interest.
- Discrimination on the grounds of age, gender or race.
- Bribery and corruption.
- Whistle-blowing.
- Accuracy of books and records.
- Privacy of employee records.
- Abuse of institutional assets.
- Corporate governance issues.

- Issues for negotiation.
- Issues in handling employee discipline.
- Issues in managing mergers, acquisitions, and the reconfiguration of UKZN.
- Handling of drug and alcohol abuse by staff and students.
- Intelligence gathering.

Any ethical misconduct would affect the image and reputation of the University. Therefore ethics must be properly managed within UKZN.

#### **7.3.3.1 (c) Identify and build strategically important stakeholder relationships**

The University's stakeholders include students, staff, donors etc. The UKZN should foster relationships with all its stakeholders built on honesty, trust and integrity. In the long term, this would accrue substantial benefits in terms of continued student patronage, staff loyalty and increased or continued donor funding.

#### **7.3.3.1 (d) Developing a customer relationship management system**

A good customer relationship management strategy/system can collect data on students and staff that can help management identify problems in the delivery process, loyalty, student/staff satisfaction, complaints, disputes or grievances and compliments received.

#### **7.3.3.1 (e) Manage the University's Return on Quality (RoQ)**

UKZN management has invested a great deal of time and money in getting the service quality equation right. This is aimed at ensuring that students, staff and other stakeholders are happy and, in so doing, ensuring continued student patronage; staff loyalty, and donor sponsorships and contributions.

#### **7.3.3.1 (f) Manage the Performance Management System properly**

The Performance Management System is a valuable management tool that can be used to improve the quality of performance and enhance productivity at UKZN. Performance evaluation at University level should focus on common themes such as individual development, management training, human resources planning, standards of performance, career progression, opinion surveys, fair treatment and, if possible, profit-sharing. UKZN has launched a Performance Management System to streamline quality issues relating to staff.

**7.3.3.2. Develop strategies and related policies that tie in with marketing issues associated with service quality**

**7.3.3.2 (a) Develop marketing programs around the concept of quality**

1. Staff must be motivated, educated and trained to deliver quality services.

- Embark on quality improvements by means of customer care initiatives.
- Develop superior branding for UKZN.

This should be synonymous with quality education, skilled academics and state-of-the-art resources, systems and technologies that are the core of delivering quality education to students.

- Develop a sound advertising and public relations strategy for UKZN.

2. To enhance UKZN's Corporate Relations Division:

- Publications including press releases, annual reports, brochures, posters, articles and employee reports should be released.
- Events, including press conferences, seminars, speeches, conferences, exhibitions, sponsorship of charitable causes, community projects that attract investors and overseas grant sponsorships should be covered in print, TV and radio media.
- Develop and distribute brochures to school learners and hold open day events to promote the University, its brand and positive image in the community of KwaZulu-Natal.

3. Conduct continuous, relevant and current market research on various aspects of service quality. Conduct staff surveys or student surveys (this could overlap with the staff CRM system).

**7.3.3.2 (b) Conduct market segmentation**

Conduct market segmentation to ascertain the variables that affect different. Affordability of a degree (price) and the availability of student residences and easily accessible campuses (distribution) are important considerations that impact on the different segments of the student population.

### **7.3.3.3 Develop strategies and related policies that tie in with the strategic issues associated with service quality**

#### **7.3.3.3 (a) Develop sound market segmentation strategies**

UKZN management should develop strategies to attract local and international segments of the student population. Each market segment can have quite different service quality expectations. It is thus important for management to understand each of its specific market segments and develop strategies to attract their attention or retain customer loyalty.

#### **7.3.3.3 (b) Have competitor intelligence strategies in place**

Any organization that wishes to promote the delivery of quality services needs to acquire relevant information about its competitors and how they satisfy their customers. UKZN should examine the marketing strategies of other South African, African and overseas universities. This information can be used to improve the University's service offerings and marketing strategies. Information should also be gathered on economic trends that affect staff, such as inflation and economic recession. Salaries and pay increases should be compared with industry norms.

#### **7.3.3.3 (c) Determine resources trade-offs and allocations**

The trade-off between human and technological resources needs to be considered when addressing service quality. It is often cheaper and more efficient to employ technology than to employ people. Furthermore, people have their own bias that can filter into the service process and compromise service quality during the service encounter.

As certain services at UKZN are people based, the University needs to manage the people aspect of resources. Contact personnel are often the drivers of service quality. Simple things from pay incentives, to good working conditions, effective team management and reliable technical support can make a big difference in improving the working lives of staff and enhance their commitment to service excellence. In the long term, committed, well-trained and motivated staff reduces recruitment costs and training costs, and can build stable customer relationships; however, technological solutions to the service quality problem should not be overlooked. UKZN should consider introducing technology that enhances overall quality within their respective service offerings. Adequate training should be provided to ensure that staff use such technology to its maximum capacity.

### **7.3.3.3 (d) Aligning quality within all the University structures**

Quality should be aligned from the strategic level to all short- and medium- term level plans. This includes developing a quality charter to fit with UKZN's vision, mission and long term goals and objectives. This charter should then filter into the policies and procedures that form part of the short- to medium-term goals of the University.

### **7.3.3.3 (e) Develop strategies and related policies that can monitor and improve service quality within the University**

#### **- Feedback**

UKZN management should solicit feedback from customers and other stakeholders on a regular basis.

A good CRM system should be set up to track student or staff comments, queries, suggestions and complaints.

#### **- University quality audits**

This can be done per College or Faculty or for support and administration service areas. Staff and students should be encouraged to comment on the quality of the services offered by specific service centres.

#### **- Quality monitors**

1. Set up a service environment/branch quality maintenance index for registration, graduation, parking, safety and convenience of location.
2. Conduct a staff climate monitor to measure employees' views of customer service with regards to the services they offer. Staff surveys could also assess the impact of the University's service philosophy on factors such as staff motivation and staff morale, as these indirectly affect quality. If a staff member is happy then they are more enthusiastic towards their job; this, in turn, can make them more efficient in delivering services.
3. "Risk point" analysis - Track and monitor students' complaints and queries.

5. Review service standards - Benchmarking can be used to review the University's services, for example, between Faculties. Benchmarking and service blueprinting are two valuable techniques that can be used to improving service quality at the University; these are discussed in some detail. In terms of benchmarking, UKZN should compare itself with other tertiary institutions in order to improve its current quality variables. For example, UKZN can measure its ranking in terms of research output against that of other South African universities.

#### **7.4 Contribution to Knowledge**

In light of the limited research that has been conducted on service quality within tertiary institutions (as opposed to the commercial sector), this study has made a meaningful contribution by adding to the body of knowledge regarding student and staff perceptions of service quality in tertiary institutions in South Africa, as well as globally. The study adapted the SERVQUAL model to the tertiary education sector. The findings of the study recorded the perceptions and expectations of staff and students, respectively. The relevant quality "Gaps for Tangibles, Responsiveness, Reliability Empathy and Assurance" were identified for staff and students. Thereafter, relevant recommendations have been put presented to close these gaps. The results of the empirical study illustrated that both staff and students at UKZN were very dissatisfied with the quality of services provided. The importance of this study's results is that they can be used by UKZN management of the UKZN to draw up marketing strategies for each service offering made to students and staff. Furthermore, because the study was conducted at a South African university, it has generated further knowledge on the unique challenges of transformation, mergers and university re-organization.

This study was based on the Africa continent which has a unique higher education dynamic in that students are required to pay for their university studies, unlike some European countries. This in itself poses a challenge as students who pay for tertiary services view them in a more critical light; they require value for their money as they are "paying customers" of the university. The literature review revealed that there have been few studies on tertiary education services on the African continent as opposed to Europe and other western countries. Furthermore, the studies that have been conducted in Africa focused on students only, or a segment of the university population.

This study examined academic or support services that form part of the total service offering made to the students. This enabled students' experience of the tertiary service experience to be viewed more holistically. Although teaching and learning are the major service provided to students, other services like libraries, student residences, student counselling and safety and security on campus etc. that fall under support/administrative services add value to students' tertiary education experience. This study contributed to the body of knowledge by identifying and discussing in detail the total service offering made to students.

One of the major contributions of this study was that it focused on both staff and students at UKZN. Furthermore, unlike other studies, it incorporated all staff and student segments. The study identified quality gaps prevalent between staff and students; this added to the body of knowledge as most previous studies focused on students only. A further contribution of the study is that its findings and recommendations could help UKZN management to identify the University's service quality gaps and find way to close these gaps. It is also envisaged that the findings and recommendations emanating from this study will be disseminated to the Department of Education in KwaZulu-Natal and other universities in South Africa in order to make them aware of the various benefits of providing high quality services and why universities should spend more time and money in understanding students' perceptions.

### **7.5 Directions for future research**

- This study focused on staff and student perceptions of service quality at UKZN only. This was motivated by the fact that this was the researcher's place of employment and study, as well as logistical and financial considerations. Future studies could take the study further and examine all major universities in KwaZulu-Natal.
- A more comprehensive study could be undertaken nationally of all South Africa's major universities in the different provinces. This would provide a comparative analysis of the way in which staff and students view quality dimensions.
- The study could also be undertaken on all major universities in Africa that have a high international ranking to examine quality and its impact on these institutions.
- A study on mergers or reconfigurations of South African universities and their effect on staff and student quality perceptions of these universities is area for future research.

- Further areas of future research include service marketing connected to quality research. Examples include corporate branding and its impact on university stakeholders, the impact of positive or negative public relations, the changing dynamics of students and the reasons why they choose a particular university.

## 7.6 Summary

This study investigated student and staff perceptions of service quality at UKZN. The literature reviewed for this study enabled the identification of different models of service quality. The study adapted the SERVQUAL and Gaps model to the tertiary education service sector. This enabled the researcher to measure student and staff perceptions and expectations of the various quality variables/dimensions of UKZN services. Quality Gaps that arose from the empirical study among students and staff were identified and discussed. Based on the results obtained in line with this study's research objectives and key hypotheses, it was shown that both staff and students were very dissatisfied with the quality of services provided by UKZN. The study's results can be used by UKZN management to formulate marketing strategies for each service offering made to students and staff at the university. Management can harness this information to improve the quality of services offered to students and staff by closing the quality gaps that exist in the service offerings. In this chapter various recommendations to close the quality gaps found in this study were presented and areas for future research that tie in with the theme of service quality research were outlined.

A few crucial hypothesis questions indicated the reality that students and staff were highly dissatisfied with the quality of services offered at UKZN. For instance, the overall findings of this study indicated that there were statistically significant differences in the responsiveness and empathy Gap scores between staff and students ( $p < 0.01$ ). The hypothesis was accepted. The responsiveness and empathy Gap scores for students were higher. This indicated that students had higher expectations that the University would be more responsive and empathetic than the staff. A large Gap score for responsiveness could be due to the students at the University feeling that they had to wait for long periods of time for services. The high empathy Gap score for students was possibly due to students feeling that the University did not care about them or share their concerns.

The results of the empirical study indicate that there were statistically significant differences in the Gap scores for all the quality dimensions amongst the students on the different campuses



( $p < 0.01$ ). The hypothesis was accepted. For all the quality dimensions, the Gap scores were highest at the Howard College campus. This indicated that students expected this campus to have better tangibles, be more reliable, more responsive, more empathic and have higher levels of assurance.

The results also indicated that there was statistically significant difference in the Gap score for: exam services; registration services ( $p < 0.01$ ); risk management services ( $z = -10.859$ ;  $p < 0.01$ ); graduation services ( $z = -11.959$ ;  $p < 0.01$ ); student records services ( $z = -11.476$ ;  $p < 0.01$ ); student information and applications services; financial aid services; SRC services; library services; student residence services; wellness centre services; Deans; and Executive management services ( $p < 0.01$ ). The hypothesis was accepted. The large Gap scores in the above services could be due to students having far greater expectations of these services. Students may also perceive the above as being poor service centres within the University. Every year major problems have been encountered in student registration, financial aid and student residence service centres. Students went on strike at UKZN in 2009, 2010 and 2011 in response to problems and disputes arising in these service centres. This indicates that the results of the study tally with what students perceived.

Staff was asked their respective perceptions (P) and expectations (E) of executive management at the UKZN. The results indicated that there were statistically significant differences in the Gap score ( $p < 0.05$ ). The hypothesis was accepted. A large Gap score could be due to staff perceiving that UKZN executive management provides poor leadership in certain areas; that is, they are administratively efficient, but not service oriented, which has contributed to low levels of service quality within the University. Over the past few years staff at UKZN has embarked on strike action and litigation because of their dissatisfaction with the executive management of the University. This has been a very disturbing factor and has led to fear and de-motivation on the part of staff, which lingers on at the University.

It could be said that the greater the level of student and staff satisfaction, the stronger the link between them and the service provider (the University). This study identified the worrying concern that students expressed dissatisfaction across the various service offerings. From academic services, to libraries, to student residents, students indicated grave dissatisfaction with UKZN. Staff also indicated great dissatisfaction with management, tangibles, safety and security on campus and various other pertinent issues that affected their work environment. Students and staff have vented their frustration in the form of strike action over the years. UKZN has made news headlines over the years in connection with poor service quality. This validates the findings of this study. There is an urgent need to bridge the gaps in service quality

as the University runs the risk of losing students to its competitors, as they may be perceived to offer better quality services. In this new millennium, where money has become a scarce resource, universities have to “up their game” by providing high quality services in both the academic and support sectors. This is their only competitive advantage to retain students and attract new students. UKZN should improve staff benefits as well as its service offerings and foster an excellent academic environment that motivates staff to remain at the University and provide students with better quality service offerings.

Based on the statistical results of the key hypotheses which are:

- (1) There are statistically significant differences in the service quality gap scores for student and staff.
- (2) There is a statistically significant difference in the Gap scores amongst the students on the different campuses.
- (3) There are statistically significant differences between the Gap scores for the general questions amongst students.
- (4) There are statistically significant differences between the Gap scores for the general questions amongst staff;

it is clear that there is a significant relationship between service quality and performance output in terms of the quality of services offered at UKZN. The results on level of significance of 0.5 and above shows rejection, while below 0.5 represents acceptance. All four key hypotheses were accepted. This leads to the conclusion that the services offered by the University are not satisfactory; this underlines to need for tertiary institutions such as UKZN to improve the quality of their service delivery.

It can therefore be argued that tertiary institutions need to investigate staff and student perceptions of services to measure any quality gaps that exist in order to improve their service offerings. This study sets a benchmark in tertiary institutions with specific reference to an African university. As much as it cannot be generalized, it emphasizes the importance of good quality service provision within tertiary institutions.

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## APPENDICES

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## APPENDIX A1

### UNIVERSITY OF KWAZULU-NATAL SCHOOL OF MANAGEMENT

Dear Respondent,

**PhD Research Project**

**Researcher:** Vannie Naidoo Office Telephone no: 0312608080

**Supervisor:** Dr Maxwell Phiri Office Telephone no : 033 2605843

**Research Office:** Christel Haddon Office Telephone no: 0312601553

I, a PhD candidate, in the School of Management, of the University of Kwa-Zulu Natal, invites you to participate in a research project entitled:

**Investigating service quality perceptions within tertiary institutions- A case study on the University of Kwa-Zulu Natal**

Your participation in this project is voluntary. You may refuse to participate or withdraw from the project at any time with no negative consequence. Confidentiality and anonymity of records identifying you as a participant will be maintained by the School of Management, UKZN.

If you have any questions or concerns about completing the questionnaire or about participating in this study, you may contact me or my supervisor at the numbers listed above.

The survey should take you about 20 minutes to complete. I hope you will take the time to complete this survey.

Sincerely

Investigators Signature : V. Naidoo

Date : 1-03-10

---

### CONSENT

I \_\_\_\_\_ (*Name: Optional*) the undersigned have read and understand the above information. I hereby consent to participate in the study outlined in this document. I understand that participation is voluntary and that I may withdraw at any stage of the process.

Participant's Signature \_\_\_\_\_

Date \_\_\_\_\_



## APPENDIX A2

### UNIVERSITY OF KWAZULU-NATAL SCHOOL OF MANAGEMENT

Dear Respondent,

**PhD Research Project**

**Researcher:** Vannie Naidoo Office Telephone no: 0312608080

**Supervisor:** Dr Maxwell Phiri Office Telephone no : 033 2605843

**Research Office:** Christel Haddon Office Telephone no: 0312601553

I, a PhD candidate, in the School of Management, of the University of Kwa-Zulu Natal, invites you to participate in a research project entitled:

**Investigating service quality perceptions within tertiary institutions- A case study on the University of Kwa-Zulu Natal**

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The survey should take you about 20 minutes to complete. I hope you will take the time to complete this survey.

Sincerely

Investigators Signature : V.Naidoo

Date : 01-03-10

---

### CONSENT

I \_\_\_\_\_ (*Name: Optional*) the undersigned have read and understand the above information. I hereby consent to participate in the study outlined in this document. I understand that participation is voluntary and that I may withdraw at any stage of the process.

Participant's Signature \_\_\_\_\_

Date \_\_\_\_\_

## APPENDIX B1

UNIVERSITY OF KWAZULU-NATAL

SCHOOL OF MANAGEMENT

### Research Project

**Supervisor:** Dr Maxwell Phiri Telephone 033 2605843  
**Researcher:** Vannie Naidoo Telephone: 0312608080  
**Research Office:** Christel Haddon Office Telephone no: 0312601553

### Title of Study:

*Investigating service quality perceptions within tertiary institutions- A case-study on the University of Kwa-Zulu Natal*

The purpose of this survey is to

- Determine student expectations about the quality of tertiary education services
- Assess the perceived quality of academic and administrative services within UKZN
- To determine the gaps between perceived performance and expectations for both academic and administrative services at UKZN and report thereon
- To introduce ways to improve quality of service within UKZN

This questionnaire comprises of three sections:

- **Section A:** Demographic questions.
- **Section B:** Customer Expectations of a University
- **Section C:** Customer Perceptions of the service that the university offers.

How to complete the questionnaire:

- You can mark each response by making a tick (  ) or a cross (  ), or encircling each appropriate response with a PEN (not a pencil), or by filling in the required words or numbers.
- Please remember to choose an answer on the scale from 1 to 5 for Section B & C
  - **1** being an answer to a statement that you “**Strongly Disagree**” with.
  - **5** being an answer to a statement that you “**Strongly Agree**” with.

Remember to answer **ALL** the questions even if they are not directly relevant to your experience. The aim is to understand how you perceive the services you are provided with.

## SECTION A: DEMOGRAPHICS

Please provide only ONE option per question below in the space provided.

1. Your age-group is?

< 20	
21-30	
31-40	
41-50	

2. Are you?

Male	
Female	

3. Are you?

An undergraduate student	
A post-graduate student	

4. How many years of formal education do you have beyond secondary/high school?

< 1 year	
1 - 2 years	
3 - 4 years	
5 - 6 years	
> 6 years	

5. Are you?

Local student	
International student	

6. What is your marital status?

Married	
Single	
Divorced	
Widow	
Other Specify	

7. What is your highest academic/professional qualification?

High School Certificate	
Degree	
Post- grad Degree	
Diploma	
Other Specify	

8. For how many years have you been employed?

< 1 year	
1 – 5 years	
6 – 10 years	
11 – 15 years	
> 16 years	

9. Please indicate what faculty you are currently studying in?

Faculty of Science and Agriculture,	
Faculty of Humanities, Development and Social Science	
Faculty of Health Science	
Faculty of Law	
Faculty of Engineering	
Faculty of management Studies	
Nelson R. Mandela School of Medicine	
Faculty of Education	

10. What other factors motivated you to come to study at UKZN?

Government Funding	
Family Funding	
Availability of accommodation	
Distance to home	
Other	

11. At which campus are you based?

Edgewood Campus	
Howard College Campus	
Westville Campus	
Medical School Campus	
Petermaritzburg Campus	

## SECTION B: EXPECTATIONS

The following 63 statements will analyze what you think an excellent university should do for you.

The scale is as follows:

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

1. When an excellent university promises to do something by a certain time, they will do so.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

2. When a student has a problem, an excellent university employee will show sincere interest in solving it.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

3. An excellent university will provide the service right the first time.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

4. An excellent university will provide their service at the time they promise to do so.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

5. An excellent university will insist on error free records.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

6. Employees of an excellent university will tell students exactly when services will be performed.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

7. Employees of an excellent university will give prompt service to students.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

8. Employees of an excellent university will always be willing to help students.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5



9. Employees of an excellent university will never be too busy to respond to student requests.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

10. The behavior of employees of an excellent university will instill confidence in students.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

11. Students of an excellent university will feel safe in their transactions.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

12. Employees of an excellent university will be consistently courteous to students.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

13. Employees of an excellent university will have the knowledge to answer students' questions.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

14. An excellent university will give students individual attention.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

15. An excellent university will have employees who give students personal attention.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

16. An excellent university will have the student's best interest at heart.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

17. Employees of an excellent university will understand the specific needs of their students.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

18. An excellent university will have modern looking equipment.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5



19. An excellent university's physical facilities are visually appealing.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

20. Employees of an excellent university will be neat in appearance.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

21. Materials associated with the service such as brochures are visually appealing at an excellent university.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

22. An excellent university will have operating hours convenient to all their students.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

23. An excellent university provides flexibility to move within the school of study.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

24. At an excellent university the degrees should provide flexibility.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

25. Specialist programmes are provided at an excellent university.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

26. Flexible entry requirements are in place at an excellent university.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

27. Practical component in degree is present at an excellent university.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

28. An excellent university provides a reputable degree.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

29. An excellent university has well skilled and highly qualified instructors.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

30. Well established academic facilities are present within an excellent university.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

31. Reasonable cost of accommodation is provided by an excellent university.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

32. Well established accommodation facilities are provided by an excellent university.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

33. An excellent university has well established sports and recreational facilities.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

34. Reasonable cost of education is provided by an excellent university.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

35. Graduates from an excellent university are easily employable.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

36. An excellent university provides extremely good information on career opportunities.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

37. An excellent university provides adequate library facilities to cater to the needs of its students.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

38. An excellent university is ideally located.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

39. An excellent university has extremely appealing campus layout and appearance.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

40. An excellent university has adequate parking facilities.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

41. An excellent university provides a safe and secure learning environment.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

42. An excellent university provides adequate specialised services to the disabled student community.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

43. An excellent university provides adequate scholarships and bursaries to students who excel.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

44. An excellent university provides high quality services to international students.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

45. An excellent university is well ranked within South Africa.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

46. An excellent university is well ranked internationally.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

47. Academic staff at an excellent university provide top quality services to students.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

48. The Exams Section at an excellent university provide top quality services to students.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

49. The Registration staff at an excellent university provide top quality services to students.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

50. The Risk Management Service staff at an excellent university provide top quality services to students.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

51. The Graduation staff at an excellent university provide top quality services to students.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

52. The Student record Section at an excellent university provide top quality services to students.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

53. The Student applications and Information Service staff at an excellent university provide top quality services to students.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

54. The Financial Aid Services staff at an excellent university provide top quality services to students.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

55. The Student Representative Council at an excellent university provide top quality services to students.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

56. Library Services staff at an excellent university provide top quality services to students.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

57. Student Residence Services at an excellent university provide top quality services to students.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

58. The wellness centre at an excellent university provide top quality services to students.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

59. The Cafeteria staff at an excellent university provide top quality services to students.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

60. The academic administrators for each module at an excellent university provides top quality services to students.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

61. The faculty office staff at an excellent university provides top quality services to students.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

62. The Dean at an excellent university provides top quality services to students.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

63. Executive Management at an excellent university provide top quality services to students.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

### SECTION C: PERCEPTIONS

The following 63 statements will analyze what you think UKZN should do for you.

The scale is as follows:

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

1. When UKZN promises to do something by a certain time, they will do so.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

2. When you have a problem, staff at UKZN show a sincere interest in solving it.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

3. UKZN staff provide the service right the first time.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

4. UKZN staff will provide their services at the time they promised to do so.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

5. UKZN insists on error free records.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

6. Employees of UKZN tell you exactly when services will be performed.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

7. Employees of UKZN give you prompt service.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

8. Employees of UKZN are always willing to help you.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

9. Employees of UKZN are never too busy to respond to your requests.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

10. The behavior of staff at UKZN instills confidence in you.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

11. You feel safe in your transactions with UKZN.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

12. Employees of UKZN are consistently courteous to you.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

13. Employees of UKZN have the knowledge to answer your questions.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

14. UKZN gives you individual attention.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

15. UKZN has employees who give you personal attention.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

16. UKZN has your best interests at heart.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

17. Employees of UKZN understand your specific needs.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

18. UKZN has modern looking equipment.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

19. UKZN physical facilities are visually appealing.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

20. Employees of UKZN are neat in appearance.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

21. Materials associated with the service such as brochures are visually appealing at UKZN.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

22. UKZN has operating hours that are convenient to you.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

23. UKZN provides flexibility to move within school of study.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

24. UKZN's degree provides flexibility.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

25. Specialist programmes are provided at UKZN.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

26. UKZN has flexible entry requirements.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

27. Practical component in degree present at UKZN.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

28. UKZN provides reputable degree.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

29. UKZN has well skilled and highly qualified instructors.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

30. UKZN has well established academic facilities.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

31. UKZN provides accommodation at a reasonable cost.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5



32. UKZN has well established accommodation facilities.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

33. UKZN has well established sports and recreation facilities.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

34. UKZN provides education at a reasonable cost.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

35. UKZN Graduates are easily employable.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

36. UKZN provides extremely good information on career opportunities.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

37. UKZN has adequate library facilities to cater to the needs of its students.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

38. UKZN is ideally located.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

39. UKZN has extremely appealing campus layout and appearance.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

40. UKZN has adequate parking facilities.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

41. UKZN provides a safe and secure learning environment.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

42. UKZN provides adequate specialised services to the disabled student community.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

43. UKZN provides adequate scholarships and bursaries to students who excel.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

44. UKZN provides high quality services to international students.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

45. UKZN is a well ranked university within South Africa.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

46. UKZN is a well ranked university internationally.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

47. Academic Staff at UKZN provide excellent quality services to students.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

48. Exams Services at UKZN provide top quality services to students.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

49. The Registration staff at UKZN provide top quality services to students.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

50. The Risk Management Service staff at UKZN provide top quality services to students.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

51. The Graduation staff at UKZN provide top quality services to students.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

52. The Student Record Section at UKZN provide top quality services to students.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

53. The Student Applications and Information Service staff at UKZN provide top quality services to students.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

54. The Financial Aid Services staff at UKZN provide top quality services to students.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

55. The Student Representative Council at UKZN provide top quality services to students.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

56. Library Services at UKZN provide top quality services to students.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

57. Student Residence Services at UKZN provide top quality services to students.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

58. The wellness centre at UKZN provide top quality services to students.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

59. The Cafeteria staff at UKZN provide top quality services to students.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

60. The academic administrators for each module at UKZN provides top quality services to students.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

61. The faculty office staff at UKZN provides top quality services to students.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

62. The Dean at UKZN provides top quality services to students.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

63. The Executive Management at UKZN provide top quality services to students.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

**Thank you for your time!**

## APPENDIX B2

UNIVERSITY OF KWAZULU-NATAL

SCHOOL OF MANAGEMENT

### Research Project

**Supervisor:** Dr Maxwell Phiri Telephone 033 2605843  
**Researcher:** Vannie Naidoo Telephone: 0312608080  
**Research Office:** Christel Haddon Office Telephone no: 0312601553

### Title of Study:

*Investigating service quality perceptions within tertiary institutions- A case-study on the University of Kwa-Zulu Natal*

The purpose of this survey is to

- Determine staffs expectations about the quality of tertiary education services
- Assess how staff perceived their quality of services offering made to students within UKZN
- To determine the gaps between perceived performance and expectations for both academic and administrative services at UKZN and report thereon
- To introduce ways to improve quality of service within UKZN

This questionnaire comprises of three sections:

- **Section A:** Demographic questions.
- **Section B:** Staff Expectations of an excellent University .
- **Section C:** Staff Perceptions of the service that they offer to students at UKZN.

How to complete the questionnaire:

- You can mark each response by making a tick (  ) or a cross (  ), or encircling each appropriate response with a PEN (not a pencil), or by filling in the required words or numbers.
- Please remember to choose an answer on the scale from 1 to 5 for Section B & C
  - 1 being an answer to a statement that you “**Strongly Disagree**” with.
  - 5 being an answer to a statement that you “**Strongly Agree**” with.

Remember to answer **ALL** the questions even if they are not directly relevant to your experience. The aim is to understand how you perceive the services you are provided with.

## SECTION A: DEMOGRAPHICS

Please provide only ONE option per question below in the space provided.

1. Your age-group is ----- years.

< 20	
21-30	
31-40	
41-50	
> 50	

2. Are you?

Male	
Female	

3. What is your marital status ?

Married	
Single	
Divorced	
Widow	
Other Specify	

4. How many years of formal education do you have beyond secondary/high school?

< 1 year	
1 - 2 years	
3 - 4 years	
5 - 6 years	
> 6 years	

5. Are you?

An academic staff	
Non-academic(support) staff	

6. Are you?

Permanent staff	
Contract staff	

7. What is your highest academic/professional qualification?

High School Certificate	
Degree	
Post-grad Degree	
Diploma	
Other Specify	

8. For how many years have you been employed?

< 1 year	
1 – 5 years	
6 – 10 years	
11 – 15 years	
> 16 years	

**Please complete either question 9, 10 or 11 as it pertains to you specifically as a staff member.**

9. If you are an academic -Please indicate what faculty you work in?

Faculty of Science and Agriculture,	
Faculty of Humanities, Development and Social Science	
Faculty of Health Science	
Faculty of Law	
Faculty of Engineering	
Faculty of management Studies	
Nelson R. Mandela School of Medicine	
Faculty of Education	

10. If you are a support staff in academia- within which faculty are you based?

Faculty of Science and Agriculture,	
Faculty of Humanities, Development and Social Science	
Faculty of Health Science	
Faculty of Law	
Faculty of Engineering	
Faculty of management Studies	
Faculty of Education	
Nelson R. Mandela School of Medicine	

11. Please indicate which support staff structure you work in?

Library Services	
Information and Communication Technology Services	
Human resources	
Student residence Services	
Public Relation Services	
Student academic administration Services	
Risk management Services	
Executive Management	
SRC	
Dean	
Wellness Centre	
Cafeteria Services	

11. At which campus are you based?

Edgewood Campus	
Howard College Campus	
Westville Campus	
Medical School Campus	
Petermaritzburg Campus	

## SECTION B: EXPECTATIONS

The following 63 statements will analyze what you think an excellent university should do for you.

The scale is as follows:

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

1. When an excellent university promises to do something by a certain time, they will do so.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

2. When a student has a problem, an excellent university employee will show sincere interest in solving it.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

3. An excellent university will provide the service right the first time.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5



4. An excellent university will provide their service at the time they promise to do so.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

5. An excellent university will insist on error free records.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

6. Employees of an excellent university will tell students exactly when services will be performed.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

7. Employees of an excellent university will give prompt service to students.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

8. Employees of an excellent university will always be willing to help students.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

9. Employees of an excellent university will never be too busy to respond to student requests.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

10. The behavior of employees of an excellent university will instill confidence in students.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

11. Students of an excellent university will feel safe in their transactions.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

12. Employees of an excellent university will be consistently courteous to students.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

13. Employees of an excellent university will have the knowledge to answer students' questions.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

14. An excellent university will give students individual attention.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

15. An excellent university will have employees who give students personal attention.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

16. An excellent university will have the student's best interest at heart.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

17. Employees of an excellent university will understand the specific needs of their students.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

18. An excellent university will have modern looking equipment.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

19. An excellent university's physical facilities are visually appealing.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

20. Employees of an excellent university will be neat in appearance.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

21. Materials associated with the service such as brochures are visually appealing at an excellent university.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

22. An excellent university will have operating hours convenient to all their students.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

23. An excellent university provides flexibility to move within the school of study.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

24. At an excellent university the degrees should provide flexibility.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

25. Specialist programmes are provided at an excellent university.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

26. Flexible entry requirements are in place at an excellent university.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

27. Practical component in degree is present at an excellent university.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

28. An excellent university provides a reputable degree.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

29. An excellent university has well skilled and highly qualified instructors.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

30. Well established academic facilities are present within an excellent university.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

31. Reasonable cost of accommodation is provided by an excellent university.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

32. Well established accommodation facilities are provided by an excellent university.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

33. An excellent university has well established sports and recreational facilities.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

34. Reasonable cost of education is provided by an excellent university.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

35. Graduates from an excellent university are easily employable.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

36. An excellent university provides extremely good information on career opportunities.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

37. An excellent university provides adequate library facilities to cater to the needs of its students.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

38. An excellent university is ideally located.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

39. An excellent university has extremely appealing campus layout and appearance.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

40. An excellent university has adequate parking facilities.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

41. An excellent university provides a safe and secure learning environment.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

42. An excellent university provides adequate specialised services to the disabled student community.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

43. An excellent university provides adequate scholarships and bursaries to students who excel.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

44. An excellent university provides high quality services to international students.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

45. An excellent university is well ranked within South Africa.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

46. An excellent university is well ranked internationally.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

47. Academic staff at an excellent university provides top quality services to students.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

48. The Exams Section at an excellent university provide top quality services to students.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

49. The Registration staff at an excellent university provide top quality services to students.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

50. The Risk Management Service staff at an excellent university provide top quality services to students.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

51. The Graduation staff at an excellent university provide top quality services to students.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

52. The Student record Section at an excellent university provide top quality services to students.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

53. The Student Applications and Information Service staff at an excellent university provide top quality services to students.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

54. The Financial Aid Services staff at an excellent university provide top quality services to students.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

55. The Student Representative Council at an excellent university provide top quality services to students.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

56. Library Services staff at an excellent university provide top quality services to students.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

57. Student Residence Services at an excellent university provide top quality services to students.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

58. The wellness centre at an excellent university provide top quality services to students.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

59. The Cafeteria staff at an excellent university provide top quality services to students.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

60. The academic administrators for each module at an excellent university provides top quality services to students.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

61. The faculty office staff at an excellent university provides top quality services to students.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

62. The Dean at an excellent university provides top quality services to students.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

63. The Executive Management at an excellent university provide top quality services to students.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

### SECTION C: PERCEPTIONS

The following 63 statements will analyze what UKZN should do for you.

The scale is as follows:

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

1. When staff at UKZN promise to do something by a certain time, they will do so.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

2. When you have a problem, staff at UKZN show a sincere interest in solving it.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

3. Staff at UKZN provide the service right the first time.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

4. Staff at UKZN provide their services at the time they promised to do so.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

5. Staff at UKZN insists on error free records.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

6. Staff at UKZN tell you exactly when services will be performed.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

7. Staff at UKZN believe that they give students prompt service.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

8. Staff at UKZN believe that they are always willing to help students.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

9. Staff at UKZN are never too busy to respond to students requests.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

10. Staff at UKZN believe that their behavior instills confidence in their students.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

11. Staff at UKZN believe that students feel safe in their transactions/ interactions with them.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

12. Staff at UKZN believe that they are consistently courteous to students.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

13. Staff at UKZN believe that they have the knowledge to answer students questions.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

14. Staff at UKZN believe that they give students individual attention.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

15. Staff at UKZN give students personal attention.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5



16. Staff at UKZN believe that they have their students best interests at heart.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

17. Staff at UKZN believe that they understand students specific needs.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

18. UKZN staff believe that they have modern equipment that help them in providing high quality service.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

19. Staff at UKZN believe that the physical facilities at the campus are visually appealing to the students.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

20. Staff at UKZN believe that they are neat in appearance.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

21. Staff at UKZN believe that materials associated with the service such as brochures are visually appealing to the students.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

22. Staff at UKZN believe that the campus has operating hours that are convenient to the student.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

23. Staff at UKZN believe that students have flexibility to move within any school of study.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

24. Staff at UKZN believe that the degree provides flexibility to students when they are choosing a perspective job.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

25. Staff at UKZN believe that Specialist programmes are provided for students at campus.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

26. Staff at UKZN believe that students have flexible entry requirements to enter the university.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

27. Staff at UKZN believe that practical component in the degree are present.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

28. Staff believe that UKZN provides students with a reputable degree.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

29. Staff believe that UKZN has well skilled and highly qualified instructors.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

30. Staff believe that UKZN has well established academic facilities.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

31. Staff believe that UKZN provides accommodation to students at a reasonable cost.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

32. Staff believe that UKZN has well established accommodation facilities.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

33. Staff believe that UKZN has well established sports and recreation facilities.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

34. Staff believe that UKZN provides education at a reasonable cost.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

35. Staff believe that UKZN Graduates are easily employable.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

36. Staff believe that UKZN provides extremely good information on career opportunities to students.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

37. Staff believe that UKZN has adequate library facilities to cater to the needs of its students.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

38. Staff are of the opinion that UKZN is ideally located.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

39. Staff are of the opinion that UKZN has extremely appealing campus layout and appearance.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

40. Staff are of the opinion that UKZN has adequate parking facilities.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

41. Staff believe that UKZN campus provides a safe and secure learning environment to their students.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

42. Staff believe that UKZN provides adequate specialised services to the disabled student community.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

43. Staff believe that UKZN provides adequate scholarships and bursaries to students who excel.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

44. Staff are of the opinion that UKZN provides high quality services to international students.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

45. Staff believe that UKZN is a well ranked university within South Africa.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

46. Staff believe that UKZN is a well ranked university internationally.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

47. Academic Staff believe that they provide excellent quality services to students.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

48. The Exams Section at UKZN provide top quality services to students.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

49. The Registration staff at UKZN provide top quality services to students.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

50. The Risk Management Service staff at UKZN provide top quality services to students.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

51. The Graduation staff at UKZN provide top quality services to students.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

52. The Student record Section at UKZN provide top quality services to students.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

53. The Student applications and Information Service staff at UKZN provide top quality services to students.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

54. The Financial Aid Services staff at UKZN provide top quality services to students.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

55. The Student Representative Council at UKZN provide top quality services to students.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

56. Library Services staff at UKZN provide top quality services to students.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

57. Student Residence Services at UKZN provide top quality services to students.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

58. The wellness centre at UKZN provide top quality services to students.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

59. The Cafeteria staff at UKZN provide top quality services to students.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

60. The academic administrators for each module at UKZN provide top quality services to students.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

61. The faculty office staff at UKZN provide top quality services to students.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

62. The Dean at UKZN provides top quality services to students.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

63. The Executive Management at UKZN provides top quality services to students.

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1	2	3	4	5

**Thank you for your time!**

## APPENDIX C

### Letter from English Editor

**62 Ferguson Road  
Glenwood  
DURBAN 4001  
Tel: 072 442 7896  
Email: [deanne.collins30@gmail.com](mailto:deanne.collins30@gmail.com)  
Income tax number: 0526066204**

20 March 2013

This is to confirm that I have edited the thesis, “Investigating Service Quality Perceptions in Tertiary Institutions – the Case of the University of KwaZulu-Natal”, by Vannie Naidoo, student number 9147832, for language and grammar.

Yours sincerely,

A handwritten signature in blue ink that reads "D Collins".

(Ms) Deanne Collins (MA)

## APPENDIX D



### Approval of Proposal by the Higher Degrees & Research Committee

13 November 2009

Student Name: Vannie Naidoo      Student No: 9147832

Qualification: PhD      Supervisor: Dr. M Phiri

Dear Vannie Naidoo

This letter confirms that your proposal, titled: 'Investigating service quality perceptions in tertiary institutions – The case of University of KwaZulu-Natal' was approved by the Higher Degrees Panel on the 12 November 2009.

Committee comments:

The committee was happy that all previous areas of concern had been addressed.

It was suggested that the student may also want to include prospective students in the study.

The decision will be placed on the agenda of the next Higher Degrees & Research Committee meeting. This will also be recorded at the Faculty Board meeting. A copy of this letter and the minutes will be placed in your file.

Yours sincerely

A handwritten signature in cursive script, appearing to read 'Christel Haddon'.

Christel Haddon  
Post Graduate Administrator  
Faculty of Management Studies

Faculty of Management Studies, Westville Campus  
Postal Address: Private Bag X54001, Durban 4000

Telephone: +27 (0) 31 260-1553 Facsimile: +27 (0) 31 260-1312 E-mail: [haddonc@ukzn.ac.za](mailto:haddonc@ukzn.ac.za)

Founding Campuses: Edgewood Howard College Medical School Pietermaritzburg Westville





RESEARCH OFFICE (GOVAN MBEKI CENTRE)  
WESTVILLE CAMPUS  
TELEPHONE NO.: 031 – 2603587  
EMAIL : sshrec@ukzn.ac.za

14 JANUARY 2010

MS. V NAIDOO (9147832)  
MANAGEMENT STUDES

Dear Ms. Naidoo

PROTOCOL REFERENCE NUMBER: HSS/0980/09D  
PROJECT TITLE: "INVESTIGATING SERVICE QUALITY PERCEPTIONS IN TERTIARY INSTITUTIONS – THE CASE OF UNIVERSITY OF KWAZULU-NATAL"

**EXPEDITED APPROVAL**

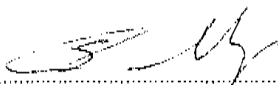
This letter serves to notify you that your application in connection with the above has been granted full approval through an expedited review process.

Any alterations to the approved research protocol i.e. Questionnaire/Interview Schedule, Informed Consent Form, Title of the Project, Location of the Study must be reviewed and approved through the amendment /modification prior to its implementation. Please quote the above reference number for all queries relating to this study.

**PLEASE NOTE: Research data should be securely stored in the school/department for a period of 5 years**

Best wishes for the successful completion of your research protocol.

Yours faithfully

  
.....  
PROFESSOR STEVEN COLLINGS (CHAIR)  
SOCIAL SCIENCES & HUMANITIES RESEARCH ETHICS COMMITTEE

cc: Supervisor (Dr. M Phiri)  
cc: Mrs. C Haddon

## APPENDIX E

### Tables for staff Respondents

**Table 5.1: Age of staff respondents**

<b>Age</b>	<b>Count</b>	<b>%</b>
< 20	4	1.6%
21-30	95	37.0%
31-40	91	35.4%
41-50	45	17.5%
>50	22	8.6%
Total	257	100%

**Table 5.2: Gender of staff respondents**

<b>Gender</b>	<b>Count</b>	<b>%</b>
Male	110	42.8%
Female	147	57.2%
Total	257	100%

**Table 5.3: Years of formal education of staff respondents**

<b>Years of Formal education</b>	<b>Count</b>	<b>%</b>
< 1 year	37	14.4%
1 - 2 years	30	11.7%
3 - 4 years	99	38.5%
5 - 6 years	39	15.2%
> 6 years	52	20.2%
Total	257	100%

**Table 5.4: Marital status of staff**

<b>Marital Status</b>	<b>Count</b>	<b>%</b>
Married	102	39.7%
Single	131	51.0%
Divorced	21	8.2%
Widow	3	1.2%
Other	0	.0%
Total	257	100%

**Table 5.5: Highest qualification of staff respondents**

<b>Qualification</b>	<b>Count</b>	<b>%</b>
High School Certificate	57	22.2%
Degree	63	24.5%
Post- grad Degree	96	37.4%
Diploma	33	12.8%
Other	8	3.1%
Total	257	100%

**Table 5.6: Years staff employed**

<b>Years employed</b>	<b>Count</b>	<b>%</b>
< 1 year	49	19.1%
1 – 5 years	74	28.8%
6 - 10 years	50	19.5%
11 - 15 years	34	13.2%
> 16 years	50	19.5%
Total	257	100%

**Table 5.7: Campus staff situated at**

<b>Campus</b>	<b>Count</b>	<b>%</b>
Edgewood Campus	21	8.3%
Howard College Campus	22	8.7%
Westville Campus	164	63.8%
Medical School Campus	3	1.2%
Pietermaritzburg Campus	47	18.3%
Total	257	100%

**Table 5.8: Category of staff respondents**

<b>Category of Staff Respondents</b>	<b>Count</b>	<b>%</b>
Academic	91	35.4%
Support	166	64.6%
Total	257	100%

**Table 5.9: Type of staff employed**

<b>Type of employment</b>	<b>Count</b>	<b>%</b>
Permanent Staff	158	61.5%
Contract Staff	99	38.5%
Total	257	100%

**Table 5.10(a): Faculty within which academic staff employed**

<b>Faculty of academic staff</b>	<b>Count</b>	<b>%</b>
Faculty of Science and Agriculture	4	4.4%
Faculty of Humanities, Development and Social Science	10	11.0%
Faculty of Health Science	4	4.4%
Faculty of Law	1	1.1%
Faculty of Engineering	2	2.2%
Faculty of Management Studies	52	57.1%
Nelson R. Mandela School of Medicine	0	.0%
Faculty of Education	18	19.8%
Total	91	100%

**Table 5.10 (b): Faculty within which academic support staff employed**

<b>Faculty of academic support staff</b>	<b>Count</b>	<b>%</b>
Faculty of Science and Agriculture	4	4.9%
Faculty of Humanities, Development and Social Science	8	9.9%
Faculty of Health Science	7	8.6%
Faculty of Law	4	4.9%
Faculty of Engineering	5	6.2%
Faculty of Management Studies	49	60.5%
Faculty of Education	1	1.2%
Nelson R. Mandela School of Medicine	3	3.7%
Total	81	100%

**Table 5.11 Administration and support staff structure**

<b>Support staff</b>	<b>Count</b>	<b>%</b>
Library Services	31	18.7%
Information and Communication Technology Services	9	5.4%
Human resources	11	6.6%
Student residence Services	7	4.2%
Public Relation Services	0	0.0%
Student academic administration Services	75	45.2%
Risk management Services	7	4.2%
Executive Management	5	3.0%
SRC	10	6.0%
Dean	4	2.4%
Wellness Centre	7	4.2%
Cafeteria Services	0	0.0%
Total	166	100%

## APPENDIX F

### Tables for student respondents

**Table 5.12: Age of student respondents**

Age	Count	%
< 20	126	33.2%
21-30	237	62.4%
31-40	15	3.9%
41-50	2	.5%
>50	0	.0%
Total	380	100%

**Table 5.13: Gender of student respondents**

Gender	Count	%
Male	188	49.5%
Female	192	50.5%
Total	380	100%

**Table 5.14: Undergrad/Post-grad Student Respondents**

Undergrad/Post-grad	Count	%
Undergraduate student	324	85.3%
Post-graduate student	56	14.7%
Total	380	100%

**Table 5.15: Student respondents years of formal education**

Years of formal education	Count	%
< 1 year	65	17.1%
1 - 2 years	99	26.1%
3 - 4 years	171	45.0%
5 - 6 years	36	9.5%
> 6 years	9	2.4%
Total	380	100%

**Table 5.16: Local and international student complement**

<b>Student complement</b>	<b>Count</b>	<b>%</b>
Local student	368	96.8%
International student	12	3.2%
Total	380	100%

**Table 5.17: Marital status of student respondents**

<b>Marital status</b>	<b>Count</b>	<b>%</b>
Married	24	6.3%
Single	349	91.8%
Divorced	2	0.5%
Widow	0	0.0%
Other	5	1.3%
Total	380	100%

**Table: 5.18 Highest qualifications of student respondents**

<b>Qualification</b>	<b>Count</b>	<b>%</b>
High School Certificate	307	80.8%
Degree	54	14.2%
Post- grad Degree	5	1.3%
Diploma	10	2.6%
Other	4	1.1%
Total	380	100%

**Table 5.19: Years of employment of student respondents**

<b>Years of employment</b>	<b>Count</b>	<b>%</b>
< 1 year	300	78.9%
1 - 5 years	65	17.1%
6 - 10 years	5	1.3%
11 - 15 years	8	2.1%
> 16 years	2	0.5%
Total	380	100%

**Table 5.20: Student respondents within faculty**

<b>Students within Faculty</b>	<b>Count</b>	<b>%</b>
Faculty of Science and Agriculture	37	9.7%
Faculty of Humanities, Development and Social Science	69	18.2%
Faculty of Health Science	19	5.0%
Faculty of Law	7	1.8%
Faculty of Engineering	17	4.5%
Faculty of management Studies	218	57.4%
Nelson R. Mandela School of Medicine	7	1.8%
Faculty of Education	6	1.6%
Total	380	100%

**Table 5.21: Factors that impacted on student respondents choosing UKZN**

<b>Factors that impacted on students choosing UKZN</b>	<b>Count</b>	<b>%</b>
Government Funding	87	22.9%
Family Funding	42	11.1%
Availability of accommodation	29	7.6%
Distance to home	113	29.7%
Other	109	28.7%
Total	380	100%

**Table 5.22: Designated campus student are respondents studying**

<b>Campus</b>	<b>Count</b>	<b>%</b>
Edgewood Campus	39	10.3%
Howard College Campus	56	14.7%
Westville Campus	234	61.6%
Medical School Campus	12	3.2%
Campus	39	10.3%
Total	380	100%